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## PRINCIPAL CONTENTS.

Portland and Rochester Railroad.....	1287
Old Colony and Newport Railroad.....	1288
Southern Trans-continental Railway.....	1289
Comparative Economy of Iron and Steel	
Rails.....	1239
Union Pacific Railroad.....	1241
Railroad Earnings.....	1248
Federal and State Securities.....	1244
Dividend and Interest Tables.....	1242, 1245
Railroad Share List.....	1250
Stock Exchange and Money Market.....	1257
Grand Rapids and Indiana Railroad.....	1260
Mobile and Montgomery Railroad.....	1281
Journal of Railroad Law.....	1282

nopoly rates upon both passengers and freights. The prevention of this monopoly and the establishment of a healthy and legitimate competition for the Maine traffic by the opening of a more direct route to New York and the West, is one feature of the enterprise, which is sufficient to secure for it a recognition as one of the most important railroad enterprises now in progress in New England.

But while the value of the Portland and Rochester road as a new outlet for the traffic of the network of railroads centering at Portland is very great, its importance as a part of the new through route from New York to Portland and Halifax is far greater, as will be seen from a glance at its many connections, both lateral and terminal. Besides the local railroads of Maine, its eastern connections open for its traffic direct communication with Halifax *via* the Kennebec and Portland, and the Maine Central and the European and North American Railroads, together forming a chain of direct communication between Portland and Halifax. At its western terminus its connections, branching in a southerly and southwesterly direction, are many and important. What these connections are, and their relative value as tributaries to the business of the Portland and Rochester road, can only be briefly indicated within the necessarily restricted limits of this article. The Worcester and Nashua road, now building, establishes direct communication with Nashua, N. H., from which point the Worcester and Nashua and the Norwich and Worcester and Worcester and Providence roads establish direct communication with New London and Providence, thus opening a new route to Portland and Halifax for the Eastern traffic of the New London and Providence steamers. From Rochester the Cochecho Railroad, the Boston, Concord and Montreal, the Vermont and Canada, and the Ogdensburg Railroads, open a direct connection with Montreal and Ogdensburg, N. Y., while the Concord and Rochester road, soon to be placed under contract, will give a short and direct line to Rutland, Vt., and the entire West. The completion of the Worcester and Nashua, and the Portland and Rochester roads, will also open a new and direct route to the most desirable section of the White Mountain region, which will secure for it a large and profitable

summer travel. From Groton Junction, a connection *via* Fitchburg, by the Vermont and Massachusetts Railroad will be established with the Hoosac Tunnel, now rapidly approaching completion, and the West. From Rochester, again, the Boston and Maine, and the Eastern roads, offer competing routes to Boston, while a third connection is made with the same city, *via* the Nashua and Boston and the Lowell roads, at Nashua. Another connection with the West is also obtained at Worcester, Mass., *via* the Boston and Albany road. With this city the connections are the most direct possible, shortening the distance to Portland by about forty miles, and avoiding the delays and difficulties incurred by both passengers and freights following the existing route *via* Boston. The completion of the road to Rochester, and the building of the Nashua and Rochester road—for which the capital is now nearly provided through subscriptions to the capital stock—will complete the connection between Portland and New York *via* the Sound steamers, as we have shown, the Springfield line, the new Connecticut Air-Line route, and the Boston, Hartford and Erie road, when the latter shall be completed to Palmer. Thus, while the distance between New York and Portland is materially reduced, the delay and expense of transhipping freight at Boston, and transferring passengers through the city from station to station, will be entirely obviated. The same favorable conditions will attract for the new route a large amount of through business to Halifax. Continuous rail communication to Halifax shortens the time consumed in a voyage to Europe by three or four days, and it is quite certain that a large portion of the European travel will follow the new route, being shorter, quicker and more convenient than passage to and from this port direct. These favorable conditions, and the network of important connections, insure for the Portland and Rochester road and its continuation, the Nashua and Rochester road, an extensive and largely profitable business in both through and local traffic, and give them a prominent rank among the most important railroads now building in the New England States. A glance at a good railroad map, giving the new road and the connections we have indicated, will show more perfectly

## American Railroad Journal.

New York Saturday, November 5, 1870.

### The Portland and Rochester Railroad.

The importance of a railroad, and its utility as a transportation route, are not always determined by its length in geographical miles or the cost of its construction. On the contrary, some short roads, from the peculiarities of their situation and the importance of their connections, render a service to the country that is of more importance to its industrial and commercial development than that often rendered by great through routes extending over half the continent. An instance of this is found in the Portland and Rochester Railroad, a short line of about fifty-two miles, extending from Rochester, New Hampshire, to Portland, Maine, but forming the connecting link in the chain of direct communication between New York and Halifax, by a shorter and more direct route than that now followed by way of Boston; besides establishing a new and more direct connection between the railroad system of the State of Maine—embracing in existing and projected lines some eight hundred miles of road—and that of the entire country. The only present connection between these two systems is that established by the Portland, Saco and Portsmouth road, which is not only inadequate to the business expected of it, but which, having a monopoly of the Maine traffic, might take advantage of its position to charge mo-

than we have been able to do the importance of this link in the chain of direct through communication between New York and Portland.

The financial condition and prospects of the Portland and Rochester Railroad Company, and of the Nashua and Rochester Railroad Company, whose interests are closely linked with it, are unusually favorable and promising. The former of these roads is making satisfactory progress towards completion, and it is the intention of the managers of the enterprise to open the entire line to business before the close of the current year. To facilitate the completion of the work the Directors have decided to issue a limited number of first mortgage bonds, of convenient denominations of \$200, \$500 and \$1,000. These bonds are to run 17 years, bearing interest at the rate of 7 per cent. per annum. With the loan granted the company by the City of Portland, they constitute the only lien upon the company's property. This issue of bonds, to the amount of \$350,000, is made with the entire concurrence of the City of Portland; a formal vote of the city council, approved by the Mayor, having placed them upon the same footing in the first mortgage security as the loan of \$200,000 made by the city itself, and thus making \$1,050,000 including the current issue of new bonds, the entire amount of the mortgage upon the property of the company. The management of the enterprise is in good hands, and the road, as far as completed, has been built in the most thorough and substantial manner—the section now in operation enjoying a large and profitable local trade which is in itself sufficient to insure the financial success of the line. Though less advanced, the prospects of the Nashua and Rochester road may be considered equally favorable. Most of the large companies owning and operating the roads which form its principal connections are represented in its management, and largely interested in its progress; and its completion will be effected without unnecessary delay, if money and business enterprise can together accomplish this desirable result.

From the facts above briefly outlined, and many others of which we are compelled to omit the mention, it is evident that the Portland and Rochester road will prove one of the most useful, as well as profitable, railway lines in the Eastern States. Lightly encumbered, and possessing extraordinary facilities for the command of a large and profitable traffic in through and local freights and passenger travel, its prospects are certainly as good as could be desired by the most prudent investor. The mortgage issued as a security upon the bonds soon to be offered in the Eastern markets, is executed to Messrs. H. J. Libby, Frederick Fox and John A. Waterman, Directors, who have been elected as Trustees for the bondholders. These bonds are in all respects a first-class security, and the importance of the road, and of its continuation from Rochester to Nashua, is sufficient to insure for them the favorable attention of the enterprising capitalists of New England.

**17** The First National Bank of Altoona, Pa., has offered to exchange \$130,000 of five-twenty six per cent. bonds for an equal amount of the new five per cents authorized by the recent act of Congress, in furtherance of the refunding of the national debt.

#### Old Colony and Newport Railroad.

The income of this road for the years ending May 31, 1869 and 1870, was as follows:

	1869.	1870.
From passengers	\$835,064 97	\$951,572 72
" freight	476,292 47	482,684 52
" expresses	54,937 24	64,718 05
" rents	22,612 10	26,519 96
" mails	18,647 98	6,564 89
" miscellaneous	118 99	2,169 00
" extra baggage	1,626 62	2,166 60
	<hr/>	<hr/>
	\$1,404,295 87	\$1,536,895 24

#### Expenses, viz:

Passenger department	\$134,631 08	\$139,183 90
Merchandise	" 114,518 22	123,118 43
Locomotive	" 234,868 69	254,718 14
Maintenance of way	192,045 89	229,385 29
General expenses	85,107 27	112,688 18
Miscellaneous	89,672 79	40,270 80
	<hr/>	<hr/>
	\$800,813 94	\$899,359 74

Earnings less exp. .... \$608,451 43 \$637,085 50

#### From which deduct:

Town, City and State taxes	\$67,584 14
U. S. tax on gross receipts	25,880 10
Interest and coupons paid	183,948 02

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277,412 28

Net income	\$859,623 24
Balance of income per last report (less debt charged off, \$15,000, and U. S. tax on surplus, \$1,714 95)	211,140 34

Total	\$570,768 58
Deduct dividends January and July \$8 per share each, and U. S. tax	312,726 32

Balance May 31, 1870 .... \$258,037 26

Compared with the previous year the gross receipts show an increase of \$182,099 87; with an increase in working expenses of \$98,515 80—making the increase in net earnings \$83,584 07. The amount paid for interest and taxes, (not including tax on dividends,) is \$20,512 51 in excess of the previous year. The increase of net income, after payment of interest and taxes, is therefore \$18,071 56.

The increase in the number of passengers carried was 351,621, in the mileage of do., 2,450,416, and in the amount received therefrom, \$116,507 75. The increase in tons carried was 19,057, and in receipts therefrom, \$6,892 05. Of the increase from passenger receipts, \$67,187 99 was from the local business. The local freight receipts have increased \$9,299 20. The freight receipts from connecting lines decreased \$2,907 15. The increase in number of miles run by trains was 42,531. The report says:

Three new locomotives, five passenger cars and thirteen freight cars have been added to the rolling stock.

Eight locomotives, ten passenger cars, eight freight cars, and twelve gravel cars have been rebuilt.

These repairs and alterations, with other repairs, make our rolling stock in better condition than it was last year.

About 700 tons of new rails and 34,000 new sleepers have been used in repairing the track, and 1,600 tons of rails have been taken up, repaired, and relaid. This, with the ordinary repairs, has kept our track in good condition.

The new passenger depot, engine house, and turn-table in process of construction last year at Plymouth, together with large additions to the freight depots and improvements to the depot grounds, have been completed, affording con-

venient and ample depot accommodations for the business of that city.

Considerable additions and improvements have been made to our depot accommodations at Fall River, especially for the New York business, in connection with the steamboat line.

The increased expense of operating the road the past year, amounting to about \$98,000, is accounted for by the increase of taxes, of miles run by trains, new depots, and repairs of buildings, road, and bridges.

The cost of repairing the damages to the road, bridges and buildings, caused by the great gale of September last, was about \$20,000.

The new arrangement for New York business has worked well, and the receipts have been satisfactory, although the rates of freight were very low during a part of the year. The depression in business has lessened our income from freight.

The local business of the Dighton and Somerset branch has increased about \$14,000 during the past year.

No change has been made, since the last report, in the land at South Boston.

Some further reductions have been made during the past year in the rates of fares and freight, season tickets, &c., and some increase in the number of trains. At the present time, our rates are as low, and our accommodations and facilities as great, as on other railroads terminating in Boston. The results of the present policy in this respect is shown in the continued increase of our business.

The trains have been run with regularity, and without accident to property. Two passengers have been fatally injured: one of whom jumped from an express train while in motion, and the other fell from the steps of a car. But little damage has been done to property of any kind; and the road, with all its appurtenances, has been well kept up, and is now in good condition.

The directors have deemed it expedient to purchase the Quincy Granite Railway, in order to extend the Mount Hope branch of this road to Belknap Square in Quincy. It is believed that this extension will, in future, afford us considerable freight business in connection with the quarries, and that there is already sufficient population upon the line to pay the expenses of passenger trains. The length of the proposed branch is about 3½ miles, all but about one-half mile of which is graded ready for the rails. It is estimated to cost, including depots, &c., about \$75,000.

The Duxbury and Cohasset Railroad Company, having received town subscriptions to its capital stock, which will insure the construction of its road, and it being important that it should form an extension of the South Shore Railroad, the directors have thought it for the interest of this corporation to assist the South Shore Railroad Company in providing for their stock subscription of \$125,000.

Citizens of New Bedford, Fairhaven, Acushnet, Rochester, Freetown, Lakeville, and Middleboro' have obtained a charter for a railroad from New Bedford to Middleboro', forming a shorter and more convenient route for travel between those points and Boston. Its location is very favorable, and the road can be built for a comparatively small sum. If the parties in interest succeed in procuring sufficient subscriptions for stock to insure the building of the road, the directors consider that it will be expedient for this corporation to aid in its construction in the manner and to the extent provided in its charter.

The equipment of the road is as follows: 27 passenger and 11 freight locomotives; 69 passenger, 18 baggage, 167 long box, 199 long platform, 9 cattle, 7 short box, 37 short platform and 90 coal and gravel cars. Number of miles run by passenger trains, 613,252; by freight trains, 270,978; by gravel trains, etc., 38,168—total, 922,398. Number of passengers carried, 2,788,969; do., carried one mile, 42,694,450. Tons of merchan-

disc carried, \$43,774; do., carried one mile, 9,791,472.

TRIAL BALANCE, MAY 31, 1870.

	Comparative Economy of Iron and Steel Rails.
Construction.....	\$7,777,489 89
Rails, shop-stock, &c. ....	113,086 60
Cash.....	157,199 98
Bills receivable.....	151,853 97
Dorchester and Milton Br. R.R. Co. ....	86,927 88
Eastern Branch R. R. Co. ....	54,800 00
Agent's department.....	12,258 15
Contract ac'ts and connecting lines..	107,045 38
	\$8,410,621 75
Capital stock.....	\$4,958,420 00
Bonds due Sept. 1, 1870. ....	9,000 00
" " 1, 1874. ....	1,000 00
" " April 1, 1875. ....	458,000 00
" " Sept. 1, 1876. ....	1,000,000 00
" " Aug. 1, 1877. ....	1,888,000 00
" " Sept. 1, 1884. ....	32,000 00
Bills payable.....	146,000 00
Unpaid dividends.....	3,564 49
Dividend payable July 1, 1870. ....	156,600 00
Income account—balance .....	258,037 26
	\$8,410,621 75

President.—HON. ONSLOW STEARNS.

Directors.—Onslow Stearns, Uriel Crocker, Benjamin Finch, Francis B. Hays, Oliver Ames, Samuel L. Crocker, John S. Brayton, Minot Tirrell and Royal W. Turner.

Treasurer.—JOHN M. WASHBURN.

Superintendent.—W. H. BULLOCK.

#### Southern Transcontinental Railway Co.

At a meeting of the corporators elected by the Legislature of the State of Texas to organize the Southern Transcontinental Railway Company, held in this city on the 31st ult., the following gentlemen were unanimously elected directors: Marshall O. Roberts, New York; John C. Fremont, New York; E. B. Hart, New York; H. W. Gray; New York; Edward Weston, New York; W. R. Stewart, New York; Ames Van Wart, New York; J. W. Forney, Pennsylvania; J. B. Bowman, Kentucky; Geo. Maney, Tennessee; C. F. Holly, New Mexico; R. M. Bishop, Ohio; J. W. Throckmorton, Texas; B. F. Grafton, Texas; G. H. Giddings, Texas; H. G. Stebbins, New York; W. R. Travers, New York; John J. Astor, New York; Edwards Pierrepont, New York; N. P. Banks, Massachusetts; J. D. Cameron, Pennsylvania; Z. F. Smith, Kentucky; W. S. Sherrod, Alabama; M. C. Hunter, Indiana; S. W. Morton, Kentucky; W. M. Harrison, Texas; W. T. Clark, Texas; J. M. Tebbetts, Arkansas; E. W. Rice, Iowa. The officers are: Marshall O. Roberts, President; Col. Henry G. Stebbins, Vice President; Wm. R. Travers, Treasurer; John D. DeFree, Secretary; and R. M. Corwine, Attorney.

#### Baltimore and Potomac Railroad.

The contracts for the construction of the Baltimore and Potomac Railroad through Charles county are now being made. The right of way has been secured, but in a few instances in which the land belongs to the estates of decedents, condemnation by juries are required. This will be attended to during the present week. On next Monday the contracts for the grading of the Alexandria and Fredericksburg Railroad, a branch of the Baltimore and Potomac, will be let. As soon as the construction of that part of the road running through Charles county is provided for, the grading between the city limits and the Patapsco will be begun.—*Balt. Am.*

The railroad between Winona and Mankato, Minn., has been completed and opened for traffic.

#### Comparative Economy of Iron and Steel Rails.

BY ASHEBEL WELCH, C. E.

The unit of value used in the following investigation is that of a mile of rails; without regard to how it is made up of tons per mile or rate per ton.

We shall have occasion to speak of value in each of its three ordinary senses, always distinguishing which; otherwise our results will be conflicting. The greatest difficulty met with in the study of our subject, arose from the ambiguity of this term.

The *intrinsic value* of a mile of rails is measured by their capacity for usefulness, and that, mainly by their endurance; and that depends on their material, size, form and quality. It does not vary, and it does not distinguish between present and future usefulness.

The *exchangeable value* is measured by price, which depends not only on intrinsic value, but on many other things, and varies frequently.

The *economic value*, as we shall call it, is measured by the combined capacity and opportunity for usefulness, that is, the actual usefulness where used, under actual circumstances. It is the value to the user. Future usefulness and future expenses chargeable against it, must be reduced to present equivalents. It may vary by variation of traffic, that is of opportunity for usefulness. It is this kind of value with which we have principally to do. We shall use the word in this sense when not otherwise stated.

An engineer who speaks of value, is likely to mean *intrinsic value*; a merchant, *exchangeable*; a shareholder, or his representative, *economic value*.

Those who have ruined their employers by splendid engineering, have done so because they neglected the distinction between the intrinsic and economic values of their work. They have created capacity for usefulness entirely disproportionate to the opportunity for usefulness.

That is the best engineering which accomplishes the purpose most economically. The present enquiry is therefore a proper one for engineers. They err who look only at intrinsic values.

A heavy steel rail, laid in a car shed, has many times the intrinsic and four or five times the exchangeable value of a light iron rail; but for use in that place, scarcely any more economic value.

These values, though widely different, are related. Economic value depends partly on intrinsic, and so in that direction is indirectly related to exchangeable value, which is also partly dependent on intrinsic. Economic value is directly affected by future prices, which control the cost of renewal or replacement.

We shall speak of the duration of rails without distinguishing between the effects of endurance, amount of traffic, weight of machinery, or speed of trains. These and other things must be carefully considered in determining the data to be used in the calculations.

Except when otherwise stated, traffic, and therefore values as well as prices, will be considered constant.

The economic value of a short-lived superstructure is most affected by endurance; that of a long-lived one, by interest, on which depends the present values of future quantities. If one mile of rails will last one month, and another ten months, on the same road, and the cost of renewal in each case is equivalent to a total loss of the rails, then, for that road, the latter is worth nearly ten times as much as the former. But if one will last ten years, till money doubles, and the other ten times as long, then the latter, for that road, is not worth quite twice as much as the former.

The present value of the second decade of the life time of a rail, is only half that of the first; of the third decade, only a quarter, and of the tenth, less than a five hundredth part of that of the first.

On a road where iron rails will last six or eight years, it is therefore of comparatively little consequence whether steel will last half a dozen, or a dozen times as long.

As the value of the rails for a particular road depends not only on their endurance, but also on the amount of traffic they are to carry in some

specified time, that is, on their opportunity for usefulness, it is important to estimate correctly, not only what they are able to carry, but what there will be for them to carry. An error in estimate of traffic on any road, is also an error in estimate of value of rails for that road.

It greatly facilitates the comparison of the values of rails, or other things of different duration, with constant traffic or constant tendency to deterioration, to compare both with those that under the same circumstances will last forever. The relations of the destructibles to the indestructibles are simpler than their relations to each other.

The practical question has generally been, and often continues to be, not, which is most economical for perpetuation, but whether iron should be used first, while traffic is light and money scarce, and steel dear, and then, when worn out, be replaced by steel.

Let  $i$  be the value of a mile of iron, or other inferior or light rails for perpetuation, and  $j$  for replacement by some superior rails, that in the place to be provided for will last through the time  $\tau$ ;  $s$  the value of steel, steel headed, or some superior or heavier rails that will last a longer time  $\tau'$ ; and  $v$  the value of a mile that under the same circumstances will last forever.

Let  $L$  and  $L'$  be the losses at the times  $\tau$  and  $\tau'$  respectively for renewals; including re-rolling, transportation, relaying, interruptions, repairs and interest thereon up to the time of renewal, risks and all other expenses and inconveniences; and  $d$  the decrease in economic value of the superior rails at the time when the inferior are worn out.

If interest is compounded more than once in the unit of time then  $r$  the real rate will be more than the nominal rate.

Let  $r$  be the rate in cents of interest for the unit

of time;  $a = (1+r) - 1$  the rate of accumulated interest for the time  $\tau$ , and  $a'$  for the time  $\tau'$ ; and  $a''$  the rate for a time equal to  $\tau' - \tau$ .

Then supposing traffic and cost of renewals constant,  $a v = a + L$  and  $a' v = a' + L'$ . Hence

$$(I.) \quad v = i + \frac{L}{a} = s + \frac{L'}{a'}$$

$$(II.) \quad i = v - \frac{L}{a} = s - \frac{L'}{a'}$$

$$(III.) \quad s = v - \frac{L}{a'} = i + \frac{L}{a'}$$

The whole current cost for each unit of time  $= r v$ ; which consists of two parts, the interest  $r$  or  $r s$ , which is paid as it accrues, and the economic depreciation  $\frac{r L}{a}$  or  $\frac{r L'}{a'}$  the payment of which, with the interest on it, is postponed till the rails are worn out.

The whole current cost that accrues during the lifetime of the rails is,  $a v$  or  $a' v$ , consisting of interest  $a$  or  $a'$ , and losses on renewal  $L$  or  $L'$ .

The present value of the loss  $L$  is  $\frac{a+L}{a+1}$ .

(IV.) The present value of  $L$  and its successors forever  $= \frac{a+L}{a+1}$ .

The present value of the accumulated interest and loss at the time  $\tau$  is,  $\frac{a+L}{a+1}$ .

(V.)  $\frac{a+L}{a+1}$ , which is sometimes a convenient measure of the expensiveness of the rail.

The physical depreciation and consequent decrease in intrinsic value of a steel rail, when the iron rail is worn out, is,  $\frac{L'}{L}$ .

(VI.)  $\frac{L'}{L}$ ; but the economic depreciation and decrease in economic value,  $d$  is  $\frac{a' L'}{a' + L}$ .

(VII.)  $d = \frac{a' L'}{a' + L} = a v - a'$ , supposing traffic constant.

If an iron rail will last till money doubles, and a steel rail four times as long, the physical depreciation of the steel, when the iron is worn out, is one-fourth of the cost of renewal; but the economic depreciation, the decrease in value to the owner, is only one-fifteenth of that cost. For, supposing the present value of the first decade to be 8; that of the second will be 4; of the third 2; and of the fourth 1; and the sum of present values of the first three decades will be 14; that of all four decades only 15; so that the value to the owner, is reduced only one-fifteenth by a reduction of one-fourth of the duration of the rail.

If the loss on renewal is a percentage  $m$  on  $i$  or  $m'$  on  $s$ , then

$$(VIII.) \frac{sv}{s+m} = \frac{as(a'+m')}{a'(a+m)} = \frac{as}{a+m} + \frac{am's}{a+m}$$

$a'(a+m)$

Steel partly worn, that will still last just as long as new iron, is not necessarily worth the same as new iron, because worn out steel is probably worth more than worn out iron. So partly worn heavy rails that will last just as long as light new rails are worth more, because the worn out heavy are worth more than the worn out light rails.

The value of the partly worn steel is  $s - d$ , and the current cost for their residuary lifetime is,

$$(IX.) s's + v' - (a'' + 1)d.$$

If the price  $p$  of the iron is not the same as its economic value  $i$ , as compared with steel, the advantage or disadvantage of the iron is of course the difference between  $p$  and  $i$ ; and the current

cost for the unit of time becomes  $v'p + \frac{a}{a+m}$ .

But  $p$  in that case cannot be substituted for  $i$  in the foregoing equations.

Any future changes in the prices of rails to be perpetuated are most conveniently provided for by increasing or decreasing the values of  $L$  and  $L'$ .

In comparing steel with iron to be replaced by steel, it is necessary to take the changes in price into the calculation. Let  $q$  be the expected price of steel at the time of replacement; and let  $b$  = balance of value of the worn out iron rails over the cost of removal, and of laying down the steel to replace them, together with all the attendant risks, inconveniences and expenses. Then to make iron for replacement equally advantageous with steel

$$b + d - q$$

(X.)  $s = s + \frac{a}{a+1}$ . Or, if the price of

$$a'v + b = as + b + d$$

steel is constant,  $s = \frac{a}{a+1} = \frac{a}{a+1}$

If the traffic is expected to vary, the time must be cut up into periods coextensive with the lifetimes of the iron rails, throughout any one of which the traffic must be considered uniform, and the depreciations and values at the end of each period found by the preceding rules.

When the traffic varies, the depreciation in value of the steel has no relation to interest past, but only to future interest. It must be found by comparing the remaining duration of the partly worn steel under the expected circumstances, with that of new steel. Then  $a'$  being the rate of accrued interest for a time equal to the difference between the residuary lifetime of the partly worn steel and new steel, and that of new steel put down at the same time being  $a'$ , the depreciation of the partly worn steel is

$$\frac{L'}{L} = \frac{a''L'}{a' L'}$$

$$(XI.) d = \frac{1 + a''}{1 + a'} - \frac{a'(1 + a')}{a''(1 + a')}$$

The loss from the value of new steel on renewal being  $L'$ , that from the value of partly worn steel will be  $L' - d$ .

When the traffic varies, the value of  $v$  varies of course with each change.

Simple and obvious when stated, as the foregoing views and rules are, they were arrived at through calculations much more complex, and sometimes apparently conflicting.

These rules, and the tables deduced from them, do not aid in determining data, nor in any degree supersede experience and sound judgment. But as there are two channels of error, one of judgment and another of calculation, convenient formulas reduce such chances to one; or at least, diminish the second.

In the following tables some illustrations of the applications of the formulas, some results and some numbers useful in finding other results are given.

TABLE 1.

Quantities frequently represented in the foregoing formulas. Steel supposed to last eight times as long as Iron. Traffic constant.

Dur'n of Iron rails.	a or a' Rate of accrued interest.	L = 4000	L' = 5000	v = Pres't val. of loss on renewals.	v' = Corresponding v' dur'n of steel rails.	d = Depreciation of steel	TABLE 1.	
							T	T'
1. 0.071+	56,380	70,425	8	8	484			
2. 0.147+	27,210	34,012	16	16	866			
3. 0.229+	17,470	21,837	24	24	271			
4. 0.317+	12,620	15,770	32	32	197			
5. 0.411+	9,732	12,165	40	40	140			
6. 0.511+	7,828	9,785	48	48	98			
7. 0.619+	6,462	8,077	56	56	67			
8. 0.734	5,450	6,812	64	64	45			
9. 0.858	4,662	5,827	72	72	30			
10. 0.990	4,041	5,051	80	80	20			
11. 1.132	3,534	4,417	88	88	12			
12. 1.283	3,118	3,897	96	96	8			
14. 1.620	2,469	3,080	..	..	..			
16. 2.007	1,993	2,491	..	..	..			
18. 2.450	1,633	2,041	..	..	..			
20. 2.959	1,389	1,736	..	..	..			
24. 4.214	949	1,186	..	..	..			
30. 6.878	581	726	..	..	..			
32. 8.040	497	621	..	..	..			
36. 10.90	367	459	..	..	..			
40. 14.68	272	340	..	..	..			
42. 16.99	285	294	..	..	..			
48. 26.18	153	191	..	..	..			
50. 30.19	182	165	..	..	..			
54. 40.07	100	125	..	..	..			
56. 46.18	87	109	..	..	..			
60. 61.06	66	82	..	..	..			
64. 80.72	50	62	..	..	..			
66. 92.77	48	54	..	..	..			
70. 122.5	38	41	..	..	..			
72. 140.7	28	35	..	..	..			
78. 218.1	19	24	..	..	..			
80. 244.7	16	20	..	..	..			
88. 425.0	9	11	..	..	..			
90. 487.9	8	10	..	..	..			
96. 737.7	5	6	..	..	..			
100. 971.8	4	5	..	..	..			

TABLE 2.

Values of one mile of rails to be equally economical.

Dur'n of Iron rails.	I = value of iron for perpetuation.	v = value of iron for replacement.	b = 2500	j = $\frac{a + b}{a + 1}$	Dur'n of steel.	Value of steel.	TABLE 2.	
							T	T'
1. -39,528	8449	8	10,000	16,812				
2. -14,719	3780	16	10,000	12,491				
3. -6,284	4126	24	10,000	11,186				
4. -1,999	4462	32	10,000	10,621				
5. -608	4784	40	10,000	10,340				
6. -2,863	5101	48	10,000	10,191				
7. -3,647	5409	56	10,000	10,109				
8. -4,612	5701	64	10,000	10,062				
9. -5,873	5980	72	10,000	10,085				
10. -5,979	6241	80	10,000	10,020				
11. -6,477	6488	88	10,000	10,011				
12. -6,888	6718	96	10,000	10,006				

TABLE 3.

Annual current cost of one mile of rails. Rails of equal economy. Traffic constant.

$$L = 4000, L' = 5000.$$

T	T'	r v	r i	—	r s	—	r a	—
1	8	1194	...	...	710	...	484	
2	16	867	...	...	710	...	177	
3	24	794	...	...	710	...	84	
4	32	754	...	...	710	...	44	
5	40	734	43	691	710	24		
6	48	724	168	556	710	14		
7	56	718	259	459	710	8		
8	64	714	327	387	710	4		
9	72	712	382	380	710	2		
10	80	711	425	286	710	1		
11	88	710	460	250	710	0		
12	96	710	489	221	710	0		

Comparative economy of Steel Rails and Iron Rails for replacement, taking into account changes in price from 1867 to 1870.

$s$ , value of iron;  $s$ , value of steel;  $q$ , price of steel when iron replaced;  $b$ , value of old rails over expenses;  $d$ , depreciation of steel;  $a$ , accrued interest;  $p$ , price of iron.

$$d + b - q$$

$$s = s + \frac{a}{a+1}$$

In 1867, steel cost \$15,000 Iron.. \$8,500

In 1868, " 14,000 " 7,600,  $b = \$8,500$

In 1869, " 12,000 " 7,600,  $b = 8,500$

In 1870, " 10,000 " 7,400,  $b = 8,500$

After '70 " 9,000 " 7,250

1867.

$s =$  value of iron for replacement,  $p$  = price of steel.

Dura'n of iron.

1	2	3	4	5	6	7	8	9	10	11	12
6650	7912	9526	10218	10491	10768	11277	11743	12157	12667	13183	13667
1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.
5917	6655	6988	7218	7491	7768	8277	8748	9157	9577	10097	10577
1088	945	667	387	109	163	677	1143	1557	1557	1557	1557

1867.

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1900.

rails and frequent trains to be interrupted, the cost and inconvenience will be much more. The loss on renewal of steel is assumed to be \$5000. That will depend partly on the cost of new steel, and that on the import duties, which are not yet settled. We have assumed that it will be \$9000 per mile, which contemplates an advance in duties sufficient to counterbalance the decline in premium on gold. The value of worn out steel is as yet quite uncertain. These, like all other data, must be ascertained for each case, and corrected on new information.

The percentage of difference between \$4000 and any other value of  $L$ , will also be the percentage of difference between the numbers in third column of table I., and the numbers deduced from such other value.

It is obvious from inspection of table IV., that iron rails to be replaced by steel have heretofore been found more economical than steel; provided, that those laid in 1867 would last two or three years, those laid in 1868, a year or two, and those laid in 1869 half a dozen years.

But in 1870 it is equally obvious that steel is more economical than iron that will last even ten or a dozen years, if our data for the future are at all correct.

As a good iron rail will last several times as long as a poor one, and there is no standard of quality, it is impossible to say how much longer steel will last than iron. It will last more than twenty times as long as much of the iron laid during the past ten years. In the tables it is assumed to last eight times as long. On most roads, for the reasons already given, this question is of but little importance.

If the cost of renewal or replacement is a fixed sum, then the difference between the values of iron and steel is also a fixed sum; and there should always be the same difference between the prices. If the cost of renewal is a percentage, the values do and the prices should differ by a percentage.

These formulae may be used in comparing the ultimate economy of bridges, buildings, vessels, and other things of different cost and durability used for the same purposes.

If single headed rails cost \$7500 and last five years, and double headed, with the chairs they set on, \$10,000 and last twice as long, and if the expenses of renewals are \$4000 and \$5000 respectively, then  $p = 7500$ ,  $s = 10000$ ,  $L = 4000$ ,  $L' = 6000$ ,  $a = 0.41$  and  $a' = 0.99$  and (neglecting the cost of reversal and constant cost of wedging the double headed.)

$$L' - L = 5000 - 4000 \\ i = s + \frac{a - a'}{a} = 10000 + \frac{0.99 - 0.41}{0.99} = 10000$$

$+ 5051 - 9782 = 5219$ . So that the double headed has the advantage of  $p - i = 7500 - 5819 = 2181$  over the single headed for perpetuity.

Suppose that a wooden bridge will cost \$10,000, and last sixteen years; and that the repairs, insurance, watching, and all expenses on it, with the interest on those expenses up to the time of renewal, and the cost of removal and the inconveniences, all together, amount to \$5000, over the value of the old materials; and that a permanent bridge can then be built at the same cost as at first. Then  $i = 10000$ ,  $L = 10000 + 5000 = 15000$  and  $s = 2$ . Substituting these in the equation

$$L = 15000 \\ v = i + \frac{2}{s} - 1, we have 10000 + \frac{2}{0.99} = 17500, equal$$

to the value of a bridge that will last forever.

When the business is very heavy, the inconvenience of renewals, and the risks from fire or accident of temporary structures, are of course controlling considerations. If the interruption caused by the burning of the wooden bridge would involve a loss of \$50,000, and the annual chance of burning is one in a hundred, then the annual risk of \$500 capitalized, adds \$7042 to the difference between the values, making that of the indestructible bridge \$24,542.

As traffic generally increases faster than is expected, (though profits do not) steel rails and permanent structures become more advantageous

than the calculations. They also have the advantage of safely allowing increased weights and speeds, which may become important.

On the other hand, where safety is not involved, and interruption would not cause serious loss, and especially where, (as happens so often in this country,) changes of route or plan are liable to be made, and where calculation makes the ultimate economy nearly equal, it is best to adopt the cheaper rail or structure. This is especially the case in station buildings and shops. Dead capital and outlay for a future generation better able to help itself than we are to help it, are thus avoided.

Our calculations are made on interest a 7 per cent., compounded semi-annually. Few railroad companies borrow at lower rates, many at much higher. Of course the calculations for each road must be based on the actual rate.

The writer having had much occasion to deal with these questions, has arranged the foregoing rules and tables for his own convenience. He presents them for publication, hoping they may sometimes abridge the labor of others who have to deal with the same questions.

Comparisons such as that of the ultimate economy of the wooden and stone bridges are often judged of in this country, though perhaps not often formally made. But an eminent European Engineer told the writer, some years ago, that the idea of such a comparison was entirely new to him.

#### Union Pacific Railroad.

The earnings, expenses and net profits of the Union Pacific railroad company from May to September, inclusive, in the years 1869 and 1870, were as follows:

1870. Earnings.	Expenses.	Net Income.
May.. \$802,586 09	\$479,640 61	\$322,945 48
June.. 746,450 01	419,151 81	327,298 20
July.. 648,058 44	388,350 38	254,708 06
Aug.. 664,050 88	349,329 93	314,720 90
Sept.. 728,520 93	286,158 16	442,362 77
Total.. \$3,584,666 30	\$1,922,630 89	\$1,662,035 41
1869.		
May.. \$797,948 49	\$512,276 89	\$285,672 10
June.. 706,602 69	534,675 72	171,926 97
July.. 623,559 96	508,421 56	115,138 40
Aug.. 617,585 38	465,443 26	152,142 12
Sept.. 758,466 90	425,916 61	332,550 29
Total.. \$3,504,168 42	\$2,446,763 54	\$1,057,399 88
Increase in receipts.....	.....	\$80,502 88
Decrease in expenses.....	.....	524,182 65

Net increase of profits for five months. \$604,635 53

#### East Tennessee, Virginia and Georgia R.R.

The report of this company for the year ending June 30, 1870, shows the earnings to be \$1,278,863 80, and ordinary expenses \$716,182 12, leaving net earnings \$562,681 68—from which should be deducted \$146,882 15 for new rails, new cars, wood lands, masonry, etc. The working expenses were 56 per cent. of gross earnings. The roadbed is in fine condition. The assets of the road are \$9,777,034. Its profit account shows \$2,552,957. The road extends from Dalton, Ga., through East Tennessee to the Virginia State line.

The construction of the Shepang Valley (Conn.) Railroad has been awarded to a Pennsylvania company, for \$370,000. It is the intention to have the road completed during the next season.

The gross funded debt of the City of Savannah, Ga., is \$2,326,280. The resources of the city are \$2,763,980. The value of the taxable real estate is over \$14,600,000, an increase of \$2,500,000 in a year.

#### MOBILE AND MONTGOMERY RAILROAD COMPANY EIGHT PER CENT. FIRST MORTGAGE BONDS. PRINCIPAL AND INTEREST PAYABLE IN GOLD. ENDORSED BY STATE OF ALABAMA.

We offer the above-named Bonds for sale, and, for the following reasons, confidently recommend them as a most desirable investment.

1. THEY ARE A FIRST MORTGAGE UPON A ROAD ALREADY COMPLETED, THOROUGHLY EQUIPPED AND IN SUCCESSFUL OPERATION. The object in placing this Mortgage upon the Road, and of selling these Bonds, is to build an extension of 15 miles from Tensas, the present terminus, into the City of Mobile, which connection is now made by boat. This extension will give entire through Rail connection to Mobile and New Orleans, thus saving the cost and trouble of steamboat service, and delay of breaking bulk both at Tensas and Mobile. The Road, including 15 miles extension, is 182 miles long.

2. THE MORTGAGE IS AT A LOWER RATE PER MILE THAN ANY SIMILAR BOND NOW OFFERING, being for little over \$18,000 per mile—less than the Iron and Rolling Stock are actually worth. The cost of the Road is over \$90,000 per mile.

3. The Road forms the only railroad connection between Montgomery, the capital of the State of Alabama, and Mobile, its chief commercial city, making it exactly the Hudson River Railroad of Alabama, besides being a link in the great through-coast line between New Orleans, Mobile, Montgomery, Savannah, Charleston, Richmond and New York, or the interior line between the same points, via Augusta, Charlotte and Danville.

4. The Net Earnings of the Road have regularly increased at the rate of about 20 per cent. per annum since the organization in 1867, and are now much more than enough to pay the interest upon all the bonds authorized to be issued, more than one-half of which are in the hands of the Company. These earnings will be largely increased upon the completion of the Mobile and New Orleans Road, which is to be opened for through travel in about four weeks, and probably more than double upon completion of proposed extension of 15 miles.

5. They are indorsed by the State of Alabama, whose high credit is well known, her 8 per cent. currency bonds now selling at par.

6. They bear 8 per cent. interest, both principal and interest payable in Gold, interest payable semi-annually in the City of New York in May and November.

7. OVER ONE MILLION OF THESE BONDS ARE ALREADY PLACED—a single well-known and careful investor (Judge Onderdonk, of Long Island,) after personal examination of the Road and its resources, taking \$100,000 as a permanent investment, and Executors of Estates and Banking Institutions investing in amounts of from \$20,000 to \$50,000 each.

8. Only \$450,000 are on the market. These are offered by the undersigned at the low price of 95 and accrued interest, in currency.

SOUTTER & CO.,  
No. 58 WILLIAM ST.,  
DREXEL, WINTHROP & CO.,  
No. 19 WALL ST.,

## RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.
Albany & Susquehanna...100	\$1,774,824	J. & J.	Jul. '69 3	Hartford and New Haven...100	3,800,000	J. A. J & O	Oct. '70 2	Portl., Saco & Portman's...100	\$1,500,000	J. & D.	Jun. '70 3
American Central...100	800,000	J. & J.	Jul. '70 4	Hannibal and St. Joseph...100	3,000,000	Do.	Aug. '70 3	Providence & Worcester...100	1,800,000	J. & J.	July '70 3
Atlanta and West Point...100	1,232,200	J. & J.	July '70 4	Do. co. pref. 100	5,253,830	Do.	Aug. '70 3	Raleigh and Gaston...	3,000,000	A. & O.	Oct. '70 3
Atlantic & N. Carolina...100	5,545,225	Do.	Do.	Hanover Branch, Pa...50	116,850	M. & N.	Nov. '70 5	Rensselaer and Saratoga...100	2,000,000	Do.	Oct. '70 3
Atlantic & Gt. Western...50	25,879,928	Do.	Do.	Housatonic...50	82,000	Do.	Do.	Richmond and Danville...100	847,100	Do.	Do.
" " pref. 50	1,919,000	Do.	Do.	" pref. 100	1,180,000	J. & J.	July '70 4	Richmond and Petersburg...100	1,041,800	Do.	Do.
Atlantic & St. Lawrence...100	2,394,900	M. & S.	Sept. '70 2	Huntingdon & Ed. Top...50	494,380	Do.	Do.	Rockport...100	88,400	Do.	Nov. '70 3
Augusta and Savannah...100	733,700	J. & J.	Jan. '70 3	" " pref. 50	190,750	J. & J.	Jn. '68 3	Rome, Watert. and Ogallala...100	2,400,000	J. & J.	July '70 3
Baltimore and Ohio...100	16,151,962	A. & O.	Oct. '70 4	Illinoia Central...100	25,278,710	F. & A.	Aug. '70 3	Rutland preferred...100	Do.	F. & A.	Aug. '70 3
Do. Washington Br...100	1,650,000	A. & O.	Oct. '70 5	Indiana Central...100	6,185,897	M. & S.	Sep. '70 4	St. L. Alt. and T. Haute...100	2,300,000	Do.	Do.
Baltimore City Passenger...100	670,000	F. & A.	Aug. '70 3	Jefferson, Mad. & Ind...100	2,000,000	J. & J.	Jan. '70 3	" " pref. 100	2,040,000	Annual.	June '70 1
Bay du Noquet & Marq...100	1,250,000	A. & O.	Apl. '68 3	Joliet and Chicago...100	1,500,000	J. A. J & O	July '70 14	St. L. Jack'nv. and Cincinatti...100	1,468,429	Do.	Do.
Belvidere Delaware...100	996,250	Do.	Do.	Joliet & North, Indiana...100	300,000	J. & J.	July '70 4	Sandusky and Cincinnati...100	2,089,000	Do.	Do.
Berkshire...100	600,000	J. & J.	Oct. '70 3	Lake Shore & Mich. So...100	25,000,000	F. & A.	Aug. '70 4	Sandusky " " pref. 100	445,596	M. & N.	Nov. '69 3
Bloomsburg & Corning...50	250,000	J. & D.	Dec. '69 2	Leeds and Farmington...50	533,500	F. & A.	Aug. '70 4	Sandusky, Mansf. and Newark...100	901,341	Do.	Do.
Boston and Albany...100	18,726,100	J. & J.	July '70 5	Lehigh and Mahanoy...50	2,158,565	J. & J.	Jan. '70 2	Savannah and Charleston...100	1,000,000	Do.	Do.
Boston, Concord & Mont...100	459,600	M. & N.	Nov. '70 3	Lehigh and Susquehanna...50	6,739,800	M. & N.	M'y '70 3	Schuykill and Susqueh'a...50	1,269,150	Do.	Do.
Do. do. pref. 100	1,340,400	M. & N.	Nov. '70 3	Lehigh Valley...50	10,781,400	J. A. J & O	Oct. '70 24	Second and Third St. (Ph.)...50	203,757	J. & J.	July '70 3
Boston and Lowell...500	1,891,500	J. & J.	July '70 4	Lehigh Luzerne...50	344,450	J. & J.	Jan. '69 4	Schuykill Valley...50	576,050	J. & J.	Jan. '70 2
Boston and Maine...100	4,076,974	J. & J.	July '70 5	Little Miami...50	5,872,400	J. & D.	Jun. '70 4	Seaboard and Roanoke...100	868,200	M. & N.	Nov. '70 4
Boston and Providence...100	3,380,000	F. & A.	July '70 5	Lowell Horse...100	200,000	A. & O.	Oct. '70 3	Second Avenue (N. Y.)...100	670,000	Do.	July '70 2
Broadway (South Boston)...100	400,000	J. A. J & O	Oct. '70 24	Macon and Western...100	2,000,000	J. & J.	July '70 5	17th & 19th streets (Ph.)...50	180,000	F. & A.	Feb. '70 3
Broadway & 7th Av. (N. Y.)...100	2,100,000	J. & D.	June '70 3	Mahanoy & Ed. Mount...50	1,676,915	J. & J.	July '70 24	Shamokin V. and Pottaw...50	869,460	J. & J.	Feb. '70 3
Brooklyn City...100	1,000,000	F. M. A. N.	Nov. '69 3	Lomb. and South St. (Ph.)...25	90,000	Do.	Do.	Shore Line...100	636,200	J. & J.	Jan. '70 5
Brooklyn City & Newt'n...100	399,800	Do.	Do.	Long Island...50	3,000,000	F. M. A. N.	Aug. '68 2	Sixth Avenue (N. Y.)...100	750,000	Do.	May '70 -
Buffalo, Bradford & Pitts...100	1,100,000	M. & N.	Jan. '70 3	Louisv. Cin. and Lex...50	1,621,736	J. & J.	Jul. '69 3	Somerville...100	75,000	M. & N.	Nov. '70 2
Buff, New York & Erie...100	960,000	M. & N.	Nov. '70 3	Louisv. and Nashville...100	8,780,501	F. & A.	Aug. '70 4	South Carolina...100	5,819,275	Do.	Do.
Buffalo and Erie...100	5,000,000	F. & A.	Aug. '70 4	Louisv., N. Alb. & Chicago...100	2,500,000	F. & A.	Feb. '70 3	South Shore...100	259,685	F. & A.	Aug. '70 3
Cambridge Horse (Bost'n)...100	727,300	A. & O.	Oct. '70 4	Lowell Horse...100	200,000	A. & O.	Oct. '70 3	South Western, Georgia...100	3,939,900	F. & A.	Aug. '70 4
Camden and Amboy...100	5,000,000	F. & A.	Aug. '70 5	Macon and Western...100	2,000,000	J. & J.	Jan. '70 3	Staten Island...100	660,000	J. & J.	Jun. '70 4
Camden and Atlantic, pref. 50	600,000	Do.	Do.	Mahanoy & Ed. Mount...50	1,676,915	J. & J.	July '70 5	Stony Brook...100	287,300	M. & N.	May '70 3
Camden & Burlington Co...100	381,000	Do.	Do.	Maine Central...100	1,611,500	Do.	Do.	Steubenville and Indiana...100	1,983,141	Do.	Do.
Cape Cod...60	721,926	J. & J.	July '70 5	Manchester & Lawrence...100	1,000,000	M. & N.	Nov. '70 5	Stockbridge & Pittsfield...100	443,700	Do.	Do.
Cape May and Millville...50	447,000	J. & D.	June '70 3	Marietta & Cincinnati...50	3,028,778	Do.	Do.	Summit Branch...100	250,000	F. & A.	Aug. '70 3
Catoga...50	1,180,000	Do.	Do.	" 1st pref. 100	8,130,719	M. & S.	Sep. '68 3	Syr., Bingham, and N. Y...100	1,314,130	Do.	Do.
Catoga, pref...50	2,200,000	M. & N.	Nov. '70 3	" 2d pref. 50	4,460,368	M. & S.	Sep. '68 3	Taunton Branch...100	260,000	J. & D.	Jun. '70 4
Gayuga & Susquehanna...50	589,110	J. & J.	July '70 4	Memphis and Charleston...100	5,312,725	Do.	Do.	Tennessee and Alabama...100	596,922	Do.	Do.
Oedar Rapids & Mo. pref...100	755,000	M. & N.	Nov. '70 3	Memphis and Ohio...100	570,000	Do.	Do.	Terre Haute and Indiana...50	1,983,150	J. & J.	July '70 3
Central of Georgia...100	4,666,900	J. & J.	July '70 5	Metropolitan (Boston)...100	1,250,000	J. & J.	July '70 5	Third Avenue (N. Y.)...100	1,750,000	J. & J.	July '70 3
Central of New Jersey...100	15,000,000	J. & J.	July '70 5	Michigan Central...100	11,197,348	J. & J.	July '70 5	Thirteenth and Fif. (Ph.)...50	1,200,000	Do.	Do.
Central Ohio...100	2,600,000	J. & D.	June '70 1	Middlesex (Boston)...100	400,000	A. & O.	Oct. '70 3	Tol., Peoria and Warsaw...100	2,700,000	Do.	Do.
Do. pref...100	400,000	J. & D.	June '70 3	Mil Creek and Minehill...50	323,875	J. & J.	Jan. '70 5	" " (E. D.) pref. 100	1,700,000	January	1870,114
Cen. Park, N. & E. River...100	970,000	J. & J.	Oct. '69 24	Milville and Glassboro...100	405,020	F. & A.	Feb. '70 3	" " (W. D.) pref. 100	1,300,000	Do.	Do.
Chamoun...100	380,000	J. A. J & O	Jan. '70 3	Milw. & Prairie du Chien...100	Do.	Do.	Do.	Tol., Wabash and West...100	1,700,000	Do.	Do.
Cheshire, preferred...100	2,017,826	J. & J.	July '70 2	" 1st pref. 100	7,665,104	Do.	Do.	" " pref. 100	1,000,000	M. & N.	May '70 3
Chicago and Alton...100	5,141,800	M. & S.	Sept. '70 5	" " pref. 100	9,744,205	Feb. '70 3	Feb. '70 74	Troy and Boston...100	607,111	Do.	Do.
Chicago, Buri. & Quincy...100	18,826,026	M. & S.	Mar. '70 5	Do.	Do.	Feb. '70 3	Troy and Greenbush...100	274,400	J. & D.	Jun. '67 3	
Chicago, Iowa & Nebra...100	2,600,000	M. & S.	Sept. '70 5	Union Transport' (Bos.)...100	2,000,000	Do.	Do.	Union Transport' (Bos.)...100	200,000	M. & N.	Nov. '70 4
Chicago and Milwaukee...100	2,237,000	M. & S.	Sept. '70 5	Union (Phila.)...100	1,000,000	Do.	Do.	Union (Phila.)...100	291,475	J. & J.	July '70 3
Chicago & N. Western...100	14,590,182	J. & D.	Dec. '69 4	Mobile and Ohio...100	3,762,400	J. & D.	Dec. '67 4	Utica and Black River...100	834,400	J. & J.	July '70 3
" " pref. 100	18,159,097	J. & D.	June '70 2	Morristown & Erie...100	1,644,104	J. & D.	Dec. '67 4	Vermont and Canada...100	2,500,000	J. & D.	June '70 4
Chicago, R. I. & Pacific...100	16,000,000	A. & O.	Oct. '70 4	Morris & Essex...100	7,880,100	J. & D.	Jul. '70 3	Vermont Central...100	5,000,000	J. & D.	Do.
Cin. Ham. & Dayton...100	3,500,000	A. & O.	Apl. '70 3	Mt. Carbon & Pt. Carbon...50	282,850	J. & J.	Jul. '70 3	Wicksburg and Meridian...100	357,408	J. & J.	July '70 3
Cincinnati City Passenger...100	1,622,100	J. & J.	Jan. '69 2	Nashua and Lowell...100	720,000	M. & N.	Nov. '70 5	Virginia Central...100	2,353,879	Do.	Do.
Cin. Sand. & Clev. pref...50	428,648	M. & N.	Nov. '70 3	Nashville and Chattanooga...100	2,068,644	J. & J.	Do.	Virginia Central...100	1,000,000	J. & J.	July '70 3
Citizens' Passenger (Phil)...100	192,750	J. & J.	July '70 7	Naugatuck...100	1,496,600	F. & A.	Feb. '70 3	Virginia and Tennessee...100	1,500,300	Do.	Do.
Clev. Olin. Cin. & Ind...100	10,450,000	F. & A.	Aug. '70 3	New Bedford & Taunton...100	500,000	J. & J.	July '70 4	Western Union...100	2,107,933	Do.	Do.
Cleveland & Mahoning...50	2,056,400	M. & N.	Nov. '70 3	New Haven & N. London...100	738,538	Do.	Do.	West Jersey...100	1,309,000	F. & A.	Aug. '70 3
Cleveland and Pittsburgh...50	5,958,775	F. M. A. N.	Nov. '70 2	New Haven & Northampton...100	1,344,000	J. & J.	Jan. '68 3	West Philadelphia...100	249,100	J. & J.	July '70 3
Cleveland and Toledo...50	5,000,000	F. & A.	Aug. '70 4	New Jersey...100	625,000	F. & A.	Aug. '70 5	Wilm. and Weldon...100	1,463,775	J. & J.	July '70 3
Col. Ohi. & Indiana Can...100	10,460,900	J. & D.	June '70 4	New London Northern...100	895,000	J. & D.	July '70 4	Winchester and Potomac...100	1,557,850	J. & J.	July '70 3
Columbus and Xenia...50	1,732,200	J. & D.	June '70 4	N.Y. Central & Hudson R...100	45,000,000	J. & O.	Oct. '70 4	Warren...100	1,547,850	J. & J.	July '70 3
Concord...50	1,500,000	M. & N.	Nov. '70 5	" Certificates...100	44,600,000	A. & O.	Oct. '70 4	Worcester and Nashua...75	1,622,500	J. & J.	Jul. '70 3
Concord & Ports, guar...100	350,000	J. & J.	July '70 8	New York and Harlem...50	6,500,000	J. & J.	July '70 4	Wyoming Valley...50	800,000	J. & J.	Irregular
Conn. & Passau...100	138,000	Do.	Do.	" pref. 100	1,500,000	J. & J.	July '70 4	Wyoming Valley...50	800,000	J. & J.	Oct. '67 4
Connecticut River...100	1,700,000	J. & J.	July '70 5	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Cumberland Valley...50	1,216,900	A. & O.	Apl. '70 4	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Danbury and Newr...100	400,000	Do.	Do.	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Dayton and Michigan...100	2,380,640	J. & J.	July '70 3	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Delaware...50	594,260	J. & J.	July '70 3	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Del. Lackaw. & Western...50	12,382,020	J. & J.	July '70 3	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Des Moines Valley...100	1,820,200	J. & J.	July '70 3	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J.	Do.
Detroit & Milwaukee...100	452,350	Do.	Do.	Do.	Do.	Do.	Do.	Wyoming Valley...50	800,000	J. & J	

## RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Central Pacific (in gold):													
1867.	38,189	51,831	60,029	51,156	96,828	121,702	174,812	181,297	200,550	212,109	128,186	75,871	1,404,888
1868.	64,463	86,937	81,396	98,451	106,835	164,729	259,590	261,852	262,770	298,422	286,562	342,743	2,307
1869.	212,604	218,982	281,308	486,048	568,270	556,080	532,667	511,864	600,788	579,642	535,366	410,000	6,870,882
1870.	418,104	394,176	488,338	633,758	768,720	729,274	784,099	806,040	833,418	.....	.....	.....	.....
Chicago and Alton:													
1862.	109,850	101,355	104,372	122,084	132,301	145,542	149,137	157,948	170,044	170,910	156,869	158,294	1,678,706
1864.	100,991	154,418	195,803	162,723	178,786	206,090	224,257	324,165	354,564	320,870	307,808	252,015	2,770,454
1865.	280,508	275,288	299,063	258,480	322,278	355,270	335,985	409,261	401,280	357,956	307,919	236,824	3,840,092
1866.	226,153	222,241	290,111	266,249	329,851	371,644	321,597	387,269	322,638	360,223	323,080	271,247	3,626,158
1867.	243,787	167,882	235,961	282,165	338,510	342,358	354,244	416,982	408,999	426,762	369,102	330,189	3,892,861
1868.	276,117	275,140	267,094	279,121	303,842	384,504	404,012	565,101	486,196	503,746	409,569	361,701	4,508,643
1869.	343,182	315,098	388,727	328,390	345,833	402,854	351,045	498,232	506,623	468,211	387,615	340,861	4,651,468
1870.	298,978	323,825	344,366	384,658	395,044	411,986	421,485	501,049	498,635	.....	.....	.....	.....
Chicago, Rock Island and Pacific:													
1863.	140,024	130,225	122,512	126,798	144,995	170,987	139,142	160,306	210,729	216,080	190,435	201,134	1,969,387
1864.	158,736	175,482	243,150	186,013	198,679	243,178	224,980	307,874	375,860	324,865	336,617	321,087	3,064,470
1865.	305,554	246,331	289,408	196,580	234,612	321,818	244,121	306,231	389,489	307,523	270,073	301,770	3,313,514
1866.	241,395	188,585	267,230	209,099	277,506	306,693	238,926	317,977	400,941	428,474	346,028	266,268	3,466,023
1867.	202,047	224,621	272,454	265,366	297,672	276,081	297,513	444,024	566,403	569,549	442,275	377,053	4,388,614
1868.	308,587	297,464	276,431	301,952	316,709	378,436	341,885	568,580	553,387	591,208	424,589	438,435	4,797,464
1869.	332,319	368,208	398,740	388,286	449,982	522,541	455,607	632,652	736,555	584,156	479,236	398,468	5,884,100
1870.	401,275	449,655	500,393	443,300	507,900	529,512	462,400	556,100	579,600	.....	.....	.....	.....
Chicago and Northwestern:													
1863.	273,876	317,589	390,855	421,363	466,830	565,145	480,710	519,306	669,605	729,759	716,378	568,400	6,114,566
1864.	541,005	482,164	499,296	468,568	586,623	747,942	702,691	767,508	946,707	932,683	754,671	547,842	7,976,490
1865.	523,566	399,917	523,845	535,719	585,948	925,988	808,524	797,475	1,000,086	1,200,216	1,010,892	712,369	9,299,450
1866.	606,147	574,664	765,398	774,280	896,712	898,658	888,214	1,063,237	1,448,942	1,641,057	1,211,630	879,900	11,682,789
1867.	724,890	807,478	850,192	1,064,597	1,211,160	1,180,933	1,076,674	1,251,940	1,607,479	1,570,067	1,107,084	1,001,987	13,384,471
1868.	892,068	830,287	1,142,166	1,112,190	1,268,444	1,251,951	1,157,056	1,037,974	1,306,673	1,871,780	1,140,145	845,708	13,355,467
1869.	706,026	753,782	888,369	929,077	1,177,879	1,139,284	1,034,393	1,227,393	1,268,282	.....	.....	.....	.....
Cleveland, Col., Cin. and Indianapolis:													
1868.	242,205	256,180	242,509	256,435	198,959	203,696	218,347	271,425	287,451	288,206	262,798	230,061	2,918,342
1869.	204,112	180,840	239,522	247,661	241,456	259,408	258,387	341,783	320,025	296,615	271,565	242,621	3,096,966
1870.	201,500	218,600	244,161	246,046	260,169	274,021	249,355	318,012	317,887	.....	.....	.....	.....
Illinois Central:													
1862.	190,180	236,637	181,084	101,648	206,246	269,282	261,079	362,786	414,543	410,336	382,593	359,463	8,445,827
1863.	299,944	271,085	275,648	289,224	334,687	407,992	343,929	511,305	478,576	496,438	437,879	424,581	4,571,028
1864.	327,900	416,558	459,762	423,797	406,873	510,100	423,578	640,179	799,226	661,391	667,141	603,402	6,329,447
1865.	571,586	528,972	616,665	516,608	460,573	617,682	578,403	747,469	739,736	641,589	643,887	518,088	7,181,208
1866.	608,053	506,266	505,466	411,605	569,250	567,679	450,626	578,253	571,348	588,219	504,066	6,546,741	.....
1867.	647,120	524,871	417,071	440,271	477,027	516,498	525,242	709,327	738,530	828,901	727,810	618,329	7,160,962
1868.	587,448	536,166	444,443	518,800	572,551	626,249	549,714	784,326	889,967	921,530	696,401	681,041	7,817,629
1869.	650,158	624,965	709,645	568,282	640,975	771,281	696,228	841,363	979,401	914,406	814,418	696,677	8,820,482
1870.	654,587	668,891	644,374	597,571	696,263	759,215	645,768	861,388	870,584	.....	.....	.....	.....
Marietta and Cincinnati:													
1866.	90,411	86,447	84,351	81,181	96,888	103,373	98,043	106,921	104,866	113,504	112,982	128,802	1,201,239
1867.	94,136	75,978	92,910	92,768	90,526	96,536	106,594	114,716	121,217	142,823	132,887	128,383	1,278,713
1868.	92,423	81,590	84,482	108,481	95,416	95,924	108,413	126,556	121,519	125,066	119,169	121,408	1,294,095
1869.	98,517	91,666	103,558	109,526	111,083	118,648	114,496	129,388	140,473	152,860	181,019	109,629	1,350,822
1870.	90,177	98,275	101,379	106,246	110,218	111,117	111,127	118,407	132,998	.....	.....	.....	.....
Michigan Southern & Northern Indiana:													
1864.	266,600	304,445	388,484	380,661	267,251	288,126	316,258	278,891	358,862	402,219	407,107	448,934	411,800
1865.	363,996	366,361	413,974	366,180	351,489	387,095	301,613	418,575	486,808	524,760	495,072	351,799	4,826,727
1866.	312,846	277,234	412,715	413,970	418,414	384,684	338,858	384,401	429,177	496,655	429,540	352,218	4,650,322
1867.	308,857	311,088	398,372	409,248	357,109	307,989	313,130	434,318	488,388	530,871	429,785	380,034	4,663,908
1868.	342,021	388,338	378,736	452,429	389,610	386,117	308,602	437,600	521,326	543,886	436,399	437,503	4,981,108
1869—*Including Lake Shore.	1,006,998*	890,593*	1,140,000*	473,644	445,12	408,139	727,945*	838,777*	1,238,725*	1,279,602*	1,124,746*	1,048,272*	.....
1870.	931,573*	1,006,061*	1,162,697*	380,430	412,030	406,283	363,187	326,891	437,546	490,772	448,419	374,542	4,744,164
Michigan Central:													
1862.	230,158	169,658	151,902	175,696	186,039	174,002	172,189	216,624	295,956	322,369	307,474	258,634	2,650,702
1863.	242,073	245,558	236,432	283,495	238,453	206,221	193,328	216,449	308,168	375,488	339,794	306,188	3,188,056
1864.	252,436	278,548	848,802	338,276	271,553	265,780	283,244	346,781	408,445	410,802	405,510	376,470	3,970,946
1865.	306,324	279,187	344,228	337,241	401,456	366,668	338,106	413,501	476,661	490,694	447,970	328,870	4,520,650
1866.	282,489	266,796	537,158	343,737	366,198	335,058	324,986	356,646	429,161	428,640	414,604	308,669	4,260,118
1867.	304,096	288,661	375,210	362,785	333,955	324,977	313,021	386,993	464,778	506,296	412,934	330,373	4,371,038
1868.	345,316	304,316	326,880	415,768	369,238	325,501	321,013	392,942	456,973	511,920	410,826	390,671	4,506,251</

## NATIONAL AND STATE SECURITIES.

* Indicates that no interest is paid.	Interest.				* Indicates that no interest is paid.	Interest.				
	Amounts outstanding.	Rate.	Payable.	When Payable.		Amounts outstanding.	Rate.	Payable.	When Payable.	
National Securities Oct 1, 1870.					Massachusetts—Western R. R. Loan, sterling	3,578,696	5	April & Oct	69-78	
Loan of June 14, 1858 registered	\$20,000,000	5	Jan. & July.	1874	107 <sup>4</sup>	3,506,580	5	" " " " "	68-90	
..... coupon		"	"	1874	108 <sup>4</sup>	1,166,500	5	" " " " "	90-94	
Loan of June 22, 1860 registered	7,022,000	5	"	1871	---	200,000	5	Jan. & July	69-71	
..... coupon		"	"	1871	---	400,000	6	" " " " "	1877-108	
Loans of Feb. 8, July 1, Aug. 3, '61 registered	282,733,100	6	"	1881	112 <sup>4</sup>	290,400	6	" " " " "	1900	
and March 8, 1863, { registered		"	"	1881	112 <sup>4</sup>	171,000	5	Various	1870	
Oregon War Bonds of March 2, 1861	945,000	6	"	1881	108 <sup>4</sup>	117,000	5	" " " " "	1872	
		"	"	1881	---	125,000	5	April & Oct	1873	
Loan of Feb. 26, 1862 (5-20s) registered	497,179,850	6	May & Nov.	1882	108 <sup>4</sup>	244,000	5	Various	1874 108	
..... coupon		"	"	1882	108 <sup>4</sup>	182,000	6	June & Dec	70-72	
Loan of March 8, 1864 (5-20s) registered	8,129,100	6	"	1884	107 <sup>4</sup>	50,000	6	" " " " "	1877 106	
..... coupon		"	"	1884	107 <sup>4</sup>	200,000	6	Jan. & July	1871-112	
Loan of June 30, 1864 (5-20s) registered	106,968,600	6	"	1884	107 <sup>4</sup>	650,000	6	" " " " "	72-78 106	
..... coupon		"	"	1884	107 <sup>4</sup>	720,000	6	" " " " "	74-75	
Loan of March 8, 1865 (5-20s) registered	187,776,750	6	"	1885	108 <sup>4</sup>	1,430,000	6	" " " " "	1876	
..... (5-20s) coupon		"	"	1885	107 <sup>4</sup>	600,000	6	" " " " "	77-78	
2d series (5-20s) registered	277,011,900	6	Jan. & July.	1886	110 <sup>4</sup>	186,000	5	May & Nov.	1880 98	
..... coupon		"	"	1886	110 <sup>4</sup>	220,000	5	Jan. & July	1881 98	
3d series (5-20s) registered	344,140,200	6	"	1887	110 <sup>4</sup>	200,000	5	May & Nov.	1884 95	
..... coupon		"	"	1887	110 <sup>4</sup>	4,000,744	5	" " " " "	1894 95	
4th series (5-20s) registered	30,678,250	6	"	1888	110 <sup>4</sup>	4,379,500	5	" " " " "	1876	
..... coupon		"	"	1888	110 <sup>4</sup>	888,000	6	Jan. & July	1888	
Loan of March 8, 1864 (10-40s) registered	194,567,300	5	Mar. & Sept.	1894	107	2,505,000	6	Mar. & Sept.	1886 100	
..... (10-40s) coupon		"	"	1904	107	— Three Years' Loan	6	Var.	3 yrs.	
Pacific R. R. Bonds (currency)	64,618,632	5	Jan. & July.	1906-99	111 <sup>4</sup>	919,324	6	Jan. & July	1879	
Certificates of Mar. 2, 1867, and July 25, 1868	45,135,000	3	Dem.			86,000	6	Jan. & July	1878	
Navy Pension Fund of July 28, 1868	14,000,000	3	Dem.			200,000	6	" " " " "	178 98	
Loans of 1842, 1847 and 1848	34,050	6	Due.			1,728,000	6	" " " " "	78-82 100	
Texas Indemnity Bonds of Sept. 9, 1860	242,000	6	Due.			896,000	7	" " " " "	1886	
Treasury Notes prior to 1867	89,625	6	Due.			468,000	7	May & Nov.	1890	
Treasury Notes on 1857, '61 and '63	256,282	var	Due.			2,275,000	7	Jan. & July	1883	
Treasury Notes (7-30s)	504,850	7.5	Due.			7,000,000	6	Jan. & July	41-71	
Certificates of Indebtedness	5,000	6	Due.			453,000	6	Jan. & July	62-90 91	
Compound Interest Notes of 1863 and 1864	2,054,500	6	Due.			2,830,000	6	" " " " "	1887	
Temporary Loan of June 30, 1864	180,810	var	Due.			13,734,000	6	" " " " "	52-90	
U. S. Notes (greenbacks)	358,103,971	var	Dem.			1,588,000	7	" " " " "	81-87	
Fractional Currency	39,641,184	"	Dem.			8,000,000	6	" " " " "	81-86 91	
State Securities, latest dates.										
Alabama—State Bonds	168,900	5	May & Nov.	1872	72	— Renewal Loan	1,089,800	6	Jan. & July	60-78 90
..... (extended)	2,414,800	"	"	1883-85	---	— Two Million Loan	600,000	6	Mar. & Sept.	84-85 90
..... (sterling)	770,500	5	Jan. & July.	1870	70-86	— War Loan	2,267,000	6	April & Oct.	60-74 90
..... (" extended)	732,800	"	"	1886	---	— Bounty Loan	500,000	8	Jan. & July	1869
..... (new)	660,200	"	"	1894-95	100 <sup>4</sup>	— Consols. (interest)	1,599,800	6	Jan. & July	60-84 108
Arkansas—State Funded Debt Bonds	4,300,000	6	Jan. & July.	1878	9	— Railroad Loans	1,002,900	6	" " " " "	60-98
..... Aid Bonds	1,500,000	7	April & Oct.	1889	75	— State Bonds (for banks)	593,409	6	" " " " "	97-102
California—Civil Bonds of 1867	8,066,500	7	Jan. & July.	1877	112	— Three Years' Loan	700,000	7	J. A. J. & O.	1870 110
..... 1860	177,500	"	"	1880	---	— Canal Stocks	1,189,751	6	" " " " "	1878
..... Soldiers' Relief Bonds	470,500	"	"	1883	83-86	— Bond Stock	900,000	6	" " " " "	1876
..... Bounty Bonds	982,000	"	"	1885	83-86	— Canal Stocks	348,107	5	" " " " "	1874
Connecticut—War Bonds, My. '61, (10 or 20yr)	867,500	6	Jan. & July.	1871-81	101 <sup>4</sup>	— Bounty Stock	2,035,800	6	J. A. J. & O.	1872 106
..... Oct. '61, (10 or 20yr)		"	"	1872-82	---	— Bonds	3,757,000	7	Jan. & July	1877
..... Nov. 1863	7,518,692	6	"	1883	---	— Bonds	22,186,000	7	" " " " "	1877 107
..... My. '64, (10 or 20yr)		"	"	1884	---	— Bonds	8,511,000	6	J. & J. & O. & O.	60-91 48
..... May 1, 1865, (free)		"	"	1885	---	— Bonds	3,959,045	6	" " " " "	92-98 27
Florida—State Bonds	500,000	6	Var.			— Bonds	3,200,000	6	Jan. & July	1900
Georgia—State Bonds (W. & A. R. R.)	100,000	7	Jan. & July.	1870	90 <sup>4</sup>	— (new)	2,439,900	6	Jan. & July	1868
..... (" " "	176,000	"	"	1870	---	— (Chatham R. R.)	2,026,171	6	Jan. & July	1870 100
..... (Act March 12, 1866)	2,164,500	7	May & Oct.	1870	---	— (funding)	1,600,000	6	" " " " "	1876
..... (W. & A. R. R.)	1,519,000	6	Jan. & July.	1886	---	— Union Loan (Columbus)	4,095,309	6	" " " " "	1881 103
..... (Atl. and Gulf R. R.)	75,000	6	May & Oct.	1874	81	— Relief Bonds	2,400,000	6	" " " " "	1886 103
..... (sterling)	724,000	6	Feb. & Aug.	1878-86	---	— Pennsylvania—State Stocks	400,000	6	May & Nov.	1871
Illinois—New Internal Improvement Stock	1,635,954	6	Mar. & Sept.	1869	100 <sup>4</sup>	— Military Loan	82,142	7	Jan. & July	1874
..... Interest Bonds	996,649	6	Jan. & July.	1877	100 <sup>4</sup>	— Inclined Plane Loan	1,642,128	6	Jan. & July	1870 100
..... Liquidation Bonds	198,400	6	"	1885	---	— Redemption Loan of 1867	4,724,000	6	" " " " "	1882 104
..... Refunded Stock	985,900	6	"	1886	---	— State House Loans	112,000	4	Jan. & July	1882
..... Thornton Loan Bonds	104,000	6	"	1889	---	— Blue Ridge R. R.	400,000	6	April & Oct.	1879
..... War Loan Bonds	543,200	6	"	1878	---	— Funding Bonds	214,000	6	April & Oct.	1872
..... Ill. and Mich. Canal	792,222	6	"	1870	---	— Military Loan	776,000	6	Jan. & July	1877
..... registered	535,387	6	"	1870	---	— Railroad Loans	881,000	6	Feb. & Aug.	1894 101
Indiana—State Stock	2,322,926	6	Jan. & July.	1866	---	— Railroad Endorsements	314,454	6	J. A. J. & O.	1870 80
..... War Loan Bonds	210,000	6	May & Nov.	1888	---	— Funding Bonds	484,445	5	" " " " "	1868
Iowa—State Bonds of 1858	200,000	7	Jan. & July.	1868	---	— State House Loans	2,386,000	6	Jan. & July	71-70
..... War and Defense Bonds of 1861	300,000	7	"	1881	---	— Blue Ridge R. R.	1,000,000	6	" " " " "	75-79
Kansas—War Bonds, 1861-67	750,000	7	Jan. & July.	1876-97	---	— Funding Bonds	1,282,971	6	" " " " "	108
..... Territorial Debt Bonds	100,000	7	July.	1883-84	84-88	— Military Loan	910,200	5	" " " " "	72-87
Kentucky—State Bonds	1,421,000	6	April & Oct.	17-72	99	— Railroad Endorsements	2,820,760	6	" " " " "	1871 104
.....	339,000	5	May & Nov.	1879	---	— Funding Bonds	30,500	6	April & Oct.	1871
.....	160,000	5	April & Oct.	1872	---	— State House Loans	1,157,000	6	Mar. & Sept.	1882
.....	635,000	6	Various	1886	80-93	— Blue Ridge R. R.	214,000	6	April & Oct.	1883 98
Louisiana—State Bonds (Schools, &c.)	2,002,000	6	Jan. & July.	1868	---	— Funding Bonds	776,000	6	Jan. & July	1883
..... (Railroads)	864,500	6	Various	1868	---	— Military Loan	881,000	6	Feb. & Aug.	1894
..... (Charity Hospital)	86,000	6	Mar. & Sept.	1872	---	— Railroad Endorsements	314,454	6	J. A. J. & O.	1870 80
..... (Levees)	1,000,000	6	Various	1886	---	— Funding Bonds	2,386,000	6	Jan. & July	1883
..... (Funding)	2,414,000	6	May & Nov.	1907	76	— State House Loans	1,000,000	6	" " " " "	1882 104
.....	3,000,000	6	Various	1908	87	— Blue Ridge R. R.	1,282,971	6	" " " " "	70-79
Maine—Civil Loans	494,800	6	Various	1868-78	66 <sup>4</sup>	— Funding Bonds	1,282,971	6	" " " " "	70-79
.....	250,000	6	Mar. & Sept.	1869-74	---	— Military Loan	1,398,646	6	April & Oct.	Var.
.....	171,000	6	Various	1875-78	97 <sup>4</sup>	— Railroad Endorsements	2,808,160	6	" " " " "	62
..... War Loan of 1861	800,000	6	"	1871	100	— Funding Bonds	1,706,000	6	" " " " "	Var.
..... 1862	525,000	6	Mar. & Sept.	1883	97 <sup>4</sup>	— Railroad Endorsements	25,908,000	6	Jan. & July	long
..... 1864	2,832,500	6	June & Dec.	1889	97 <sup>4</sup>	— Funding Bonds	2,172,000	6	" " " " "	Var.
..... Bounty Loan of 1863	475,000	6	Feb. & Aug.	1880	98 <sup>4</sup>	— Funding Bonds	4,877,950	6	" " " " "	60
Maryland—Sterling Bonds of 1858	802,000	5	J. A. J. & O.	1865	---	— State House Loans	1,398,646	6	April & Oct.	Var.
..... converted	2,252,112	5	"	1871	99-100	— Blue Ridge R. R.	2,386,000	6	Jan. & July	71-78
.....	1,214,680	5	"	1871	99-100	— Funding Bonds	1,000,000	6	" " " " "	100
..... Currency Bonds of 1857	269,000	6	"	1890	95 <sup>4</sup>	— Blue Ridge R. R.	2,386,000	6	Jan. & July	71-78
.....	1827	5	"	1890	95 <sup>4</sup>	— Funding Bonds	1,000,000	6	" " " " "	100
..... 1834-35	24,000	5	"	1890	95 <sup>4</sup>	— Bonds	2,386,000	6	" " " " "	100
..... 1838-39	1,428,428</td									

AMERICAN RAILROAD BOND LIST.

An Asterick (\*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate	Interest Payable.			Description of Bonds.	Amount.	Rate	Interest Payable.		
			When.	Where.	Due.				When.	Where.	Due.
Adirondack:						Catawissa:					
1st Mortgage.....	\$915,000	7	Jan. & July.	New York.	1886	1st Mortgage.....	\$371,000	7	Feb. & Aug.	Philadelphia.	1882
Albany and Susquehanna:						Cedar Falls and Minnesota:					97
1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1888	1st Mort. (C. F. to Waver. 14 m.)	294,000	7	April & Oct.	New York.	1885
Albany City Loan.....	1,000,000	6	May & Nov.	"	1895	1st Mort. (W. to Minn. L. 67 m.)	1,407,000	7	Jan. & July.	"	1887
2d Mortgage for \$2,000,000 .....	2,000,000	7	April & Oct.	"	1885	Cedar Rapids and Missouri River:					...
3d Mortgage.....	175,000	7	May & Nov.	"	1889	1st Mortgage.....	3,586	7	Jan. & July.	New York.	1916
Allegheny Valley:						Central Branch Union Pacific:					88
General Mortgage.....	3,785,000	7	Jan. & July.	New York.	1896	1st Mort. (Atchison & Pike's P.)	1,600,000	6*	Mav & Nov.	New York.	'95-'96
1st Mortgage Eastern Ex. ....	59,000					2d Mortgage Governm't subsidy.	1,600,000	6	Jan. & July.	"	'95-'96
Bonds to State of Pennsylvania.	3,500,000					Central of Georgia:					...
Androscoggin:						1st Mortgage.....	786,000	7	March & Sept.	Savannah.	1875
1st Mortgage.....	425,000	6	April & Oct.	Portland.	1890	Central of New Jersey:					98
Atlantic and Great Western:						1st Mortgage.....	900,000	7	Feb. & Aug.	New York.	1870
1st Mortgage (New York).....		7*	April & Oct.	London.	1879	2d Mortgage.....	600,000	7	May & Nov.	"	1875
1st Mortgage (Pennsylvania).....		7*	"	"	1877	New Loan for \$5,000,000.....	1,500,000	7	Feb. & Aug.	"	1890
1st Mortgage (Ohio).....		7	"	"		Central Ohio:					101
6,000,000						1st Mortgage.....	2,500,000	6	March & Sept.	New York.	1890
1st Mortgage (Franklin Branch) .....						Central Pacific of California:					84
1st Mortgage (Buffalo Extension) .....						1st Mortgage (on 725 m.) free.....	26,010,000	6*	Jan. & July.	New York.	1895
1st Mortgage (Silver Creek Br.) .....						2d Mortgage (paid by Cal.).....	1,500,000	7*	"	"	1885
2d Mortgage (New York).....						Convertible bonds.....	1,500,000	7*	"	"	1883
2d Mortgage (Pennsylvania).....	3,000,000	7	April & Oct.	New York.	1881	National Loan.....	26,010,000	6	"	"	1896
2d Mortgage (Ohio).....		7*	"	"		Charlotte and South Carolina:					...
1st Consolidated Mortgage.....	20,000,000	7*	April & Oct.	London.	1882	1st Mortgage for \$500,000.....	334,000	7	Jan. & July.	New York.	1880
2d Consolidated Mortgage.....	7,000,000	5*	"	"		1st Mortgage.....	150,000	7	Jan. & July.	Charleston.	1870
Income Mortgage.....	8,701,506	7	"	"		1st Mortgage (for \$15,000,000).....	6*	May & Nov.	New York.	1900	90
Atlantic and Gulf:						Chesapeake and Ohio (Va. Cent.):					...
1st Mortgage Consolidated.....	2,000,000	—	—	New York.	1898	1st Mortgage.....	771,800	6	Jan. & July.	Boston.	'75-'80
Atlantic and St. Lawrence:						Company bonds.....					93
Portland City Loan (skg fund) .....	1,500,000	6	Various.	B. & N. Y.	'68-'70	Chester Valley:					...
2d Mortgage.....	1,614,500	6	April & Oct.	Portland.	1866	1st Mortgage.....	500,000	7	May & Nov.	Philadelphia.	1872
2d Mortgage, sterling.....	885,500	6*	"	London.	1866	Chicago and Alton:					61
Sterling Loan.....	484,000	6	May & Nov.	"		1st Mortgage, pref. sinking fund.....	356,000	7	May & Nov.	New York.	1877
Baltimore and Ohio:						1st Mortgage.....	2,383,000	7	Jan. & July.	"	1893
Loan of 1855.....	863,250	6	Jan. & July.	Baltimore.	1875	Income bonds (2d Mortgage).....	1,078,000	7	April & Oct.	"	1883
Loan of 1855.....	579,500	6	"	"		Chicago, Burlington and Quincy:					...
Loan of 1855.....	1,710,500	6	April & Oct.	"		Trust Mortgage.....	2,876,000	8	Jan. & July.	New York.	1883
Baltimore City Loan of 1855.....	5,000,000	6	Jan. & July.	"		Trust Mortgage, convertible.....	150,000	8	"	"	110
Northwestern Va. R. R. 2d Mort.	458,500	6	"	"		2d Mortgage.....	941,000	4	July.	Frankfort.	1890
Northwestern Va. R. R. 3d Mort.	140,000	6	"	"		Company bonds.....	400,000	7	March & Sept.	New York.	1890
Bay de Noquet and Marquette:						Chicago, Cincinnati and Louisv.:					...
1st Mortgage Income.....	250,000	8	April & Oct.	New York.	'70-'71	1st Mortgage for \$1,000,000.....	400,000	7	Jan. & July.	New York.	1887
Bellefontaine:						Chicago and Great Eastern:					...
1st Mortgage (B. and Ind. R. R.) .....	791,000	7	Jan. & July.	New York.	'70-'90	Construction.....	400,000	7	April & Oct.	New York.	1895
Bellefonte and Snow Shoe:						Income.....	300,000	7	"	"	41
1st Mortgage.....	99,000	6	Jan. & July.	Philadelphia.	1876	Chicago, Danville and Vincennes:					...
Belvidere Delaware:						1st Mortgage, F. S. F. ....	2,500,000	7	April & Oct.	New York.	1900
1st Mortgage (guar. by C. & A.) .....	1,000,000	6	June & Dec.	New York.	1877	Chicago, Iowa and Nebraska:					...
2d Mortgage (guar. by C. & A.) .....	500,000	6	March & Sept.	Princeton.	1885	1st Mortgage.....	1,110,000	7	Jan. & July.	New York.	1881
3d Mortgage (guar. by C. & A.) .....	745,000	6	Feb. & Aug.	"		Chicago and Milwaukee, (45 mls.):					...
Blue Ridge, S. Car.:						1st Mortgage (C. N. & W.):	397,000	7	May & Nov.	New York.	1874
1st Mortgage of \$2,500,000 .....			7	Jan. & July.	Charleston.	Consolidated sinking fund bonds.....	1,249,500	7	Feb. & Aug.	New York.	1885
Boston and Albany:						Funded Coupons.....	755,000	7	May & Nov.	"	96
Sterling Loan.....	2,051,520	5*	April & Oct.	London.	'69-'71	General 1st Mortgage.....	3,582,500	7	Feb. & Aug.	"	92
Dollar Loan.....	798,000	6	"	Boston.	1875	1st Mortgage, Appleton Ext. ....	184,000	7	"	"	...
Boston, Clinton and Fitchburg:						1st Mortgage, Green Bay Ext. ....	300,000	7	"	"	84
1st Mortgage.....						Equipment Bonds.....	101,000	7	April & Oct.	"	87
Boston, Concord and Montreal:						Mississippi River Bridge Bonds.....	200,000	7	Jan. & July.	"	...
1st Mort. (Conc. to War. 71 m.) .....	204,000	7	Feb. & Aug.	New York.	1865	Elgin and State L. purchase bds.....	138,000	6	"	"	...
2d Mort. conv. (1st M. on 224 m.) .....	100,000	6	Jan. & July.	Boston.	1870	Consolidated sinking fund bonds.....	2,077,000	7	F. M. A. & N.	"	1915
2d Mort. conv. (1st M. on 224 m.) .....	250,000	7	"	New York.	1870	Equipment Bonds.....	825,000	10	May & Nov.	"	88
Sinking Fund Mortgage.....	496,000	6	"	"		1st Mort. (Gal. & Chic. U. R. R.) .....	1,807,000	7	Feb. & Aug.	"	1882
Boston, Hartford and Erie:						1st Mort. (Gal. & Chic. U. R. R.) .....	985,000	7	May & Nov.	"	95
1st Mortgage (old).....	600,000	7	March & Sept.	Boston.	1884	1st Mortgage (Peninsular R. R.) .....	955,000	7	March & Sept.	"	90
1st Mortgage (new) for \$20,000,000 .....			7	Jan. & July.	"	1st Mort. (Beloit & Mad. R.) .....	1,129,000	7	Jan. & July.	"	1898
Boston and Lowell:						Chicago, Rock Island and Pacific:					...
Convertible bonds.....	101,000	6	Jan. & July.	Boston.	1873	1st Mortgage (C. & R. I. R. R.) .....	1,397,000	7	Jan. & July.	New York.	1870
Scrip certificates.....	366,000	3	April & Oct.	"		1st Mort. (C. R. I. P. & P. R. R.) .....	7,376,000	7	"	"	97
Wharf purchase bonds.....	200,000	6	"	"		Chilllicothe and Brunswick:					...
Buffalo, Bradford and Pittsburg:						1st Mortgage.....	500,000	8	May & Nov.	New York.	1804
1st Mortgage.....	580,000	7	Jan. & July.	New York.	1886	Cincinnati, Dayton and Eastern:					...
Buffalo, Corry and Pittsburg:						1st Mortgage.....	405,000	7	Feb. & Aug.	New York.	1896
1st Mortgage (B. C. & P. of Pa.) .....	100,000	7	Jan. & July.	Pittsburg.	18	Cincinnati, Hamilton and Dayton:					...
1st Mort. (Buff. & O.C. Cross-cut) .....	600,000	7	"	New York.	18	2d Mortgage (1st Mort. paid).....	1,250,000	7	May & Nov.	New York.	1880
Buffalo and Erie:						3d Mortgage.....	500,000	8	Jan. & July.	"	80
Co. bonds (Buff. and State Line) .....	400,000	7	June & Dec.	New York.	1870	New Mortgage.....	282,000	7	"	"	1877
Co. bonds (Buff. and State Line) .....	100,000	7	May & Nov.	"		Cincinnati and Indiana:					...
Co. bonds (Buff. and State Line) .....	200,000	7	Jan. & July.	"		1st Mortgage.....	2,500,000	7	June & Dec.	New York.	1892
Co. bonds (Erie and Northeast) .....	300,000	7	March & Sept.	"		2d Mortgage.....	2,000,000	7	Jan. & July.	"	73
Buffalo, New York and Erie:						1st Mortgage.....	1,200,000	7	Jan. & July.	New York.	1896
1st Mortgage.....						1st Mortgage.....	800,000	7	March & Sept.	"	...
2d Mortgage.....	2,000,000	7	June & Dec.	New York.	1877	1st Mortgage (Newcastle Br.) .....	250,000	7	June & Dec.	New York.	1884
3d Mortgage.....	380,000	7	May & Nov.	"		1st Mort. (Martinsville) .....	400,000	7	Jan. & July.	New York.	1896
1st Mortgage.....	600,000	8	Feb. & Aug.	New York.	1872	1st Mort. (Richmond & Chicago) .....	560,000	7	Jan. & July.	New York.	1895
Burlington and Missouri River:						Cincinnati and Zanesville:					...
Land Grant Mortgage.....	4,600,608	7	April & Oct.	New York.	1893	1st Mortgage.....	1,300,000	7	May & Nov.	New York.	1893
1st Convertible bonds.....	600,000	7	Jan. & July.	"		1st Mortgage.....	1,200,000	7	Jan. & July.	New York.	1896
2d Convertible bonds.....	600,000	7	"	"		1st Mortgage.....	850,000	7	March & Sept.	"	...
3d Convertible bonds.....	958,645	8	"	"		1st mortgage.....	976,000	7	June & Dec.	New York.	1890
California Pacific:						1st mortgage.....					...
1st Mortgage, sinking fund.....	2,250,000	7*	Jan. & July.	New York.	1889	Cincinnati, Sandusky and Clev.:					...
Camden and Amboy:						1st mortgage.....	976,000	7	June & Dec.	New York.	1894
Sterling Bonds, skg fund £313,650	1,518,066	6*	Jan. & July.	London.	1880	1st mortgage.....	425,000	7	June & Dec.	New York.	1896
" Loan, £328,200 & £154,000	2,000,000	5*	March & Sept.	"		1st Mortgage.....	850,000	7	Feb. & Aug.	New York.	1873
Loan for \$800,000.....	323,040	6	April & Oct.	New York.	1870	3d Mortgage.....	587,000	8	March & Sept.	"	...
Loan for \$675,000.....	675,000	6	"	"		Hubbard Branch, 1st Mortgage.....	147,500	7	Jan. & July.	"	1881
Loan for \$1,700,000.....	1,700,000	6	Feb. & Aug.	"		Cleveland and Pittsburg:					...
Loan for \$2,500,000.....	367,000	6	June & Dec.	"		1st Mortgage.....	1,130,000	6	March & Sept.	New York.	1873
Consol. Mortgage for \$5,000,000.....	4,866,100	6	May & Nov.	"		2d Mortgage (or 1st Extension) .....	1,597,000	7	May & Nov.	"	100
Camden and Atlantic:						3d Mortgage.....	587,000	8	March & Sept.	"	98
1st Mortgage.....						4th Mortgage (or 3d Extension) .....	1,106,489	7	Jan. & July.	"	92
2d Mortgage.....	490,000	7	Jan. & July.	Philadelphia.	1873	Consol. S. F. Mort. (\$6,000,000) .....					

## AMERICAN RAILROAD BOND LIST.

An Asterick (\*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate.	Interest Payable.			Description of Bonds.	Amount.	Rate.	Interest Payable.				
			When.	Where.	Due.				When.	Where.	Due.		
Clev., Painesv. & Ash. (L. Shore):						Erie:							
1st Mortgage.....	\$500,000	7	Jan. & July.	New York.	1874	92	1st Mortgage.....	\$3,000,000	7	May & Nov.	New York.	1897	100
2d Mortgage.....	1,000,000	7	" "	"	1880	...	2d Mortgage.....	4,000,000	7	March & Sept.	" "	1879	92
3d Mortgage.....	1,000,000	7	April & Oct.	" "	1892	91	3d Mortgage.....	6,000,000	7	" "	" "	1883	87
Cleveland & Toledo (Lake Shore):						4th Mortgage.....	4,441,000	7	April & Oct.	" "	" "	1880	80
1st Mort. (June. R. R. 1st Div.)	13,000	7	April & Oct.	New York.	1867	...	5th Mortgage.....	926,500	7	June & Dec.	" "	1888	80
1st Mort. (June. R. R. 2d Div.)	116,000	7	June & Dec.	" "	1882	...	Buffalo Branch Bonds.....	186,400	7	Jan. & July.	" "	1891	...
1st Mortgage S. F. (Clev. & Tol.)	2,015,000	7	Jan. & July.	" "	1885	100	Sterling Loan £800,000	4,844,444	6*	March & Sept.	London.	1875	...
2d Mortgage (Clev. and Tol.)	1,000,000	7	April & Oct.	" "	1886	...	Erie and Pittsburg:						
Columbus and Augusta:						1st Mortgage.....	900,000	7	Jan. & July.	Philadelphia.	1882	...	
Columbus, Chicago & Ind. Cent.:						2d Mortgage.....	700,000	7	April & Oct.	" "	1875	...	
Consol. 1st Mortgage skg fund.	15,000,000	7	April & Oct.	New York.	1908	81	New Mortgage.....	859,000	7	Jan. & July.	" "	1893	...
Columbus and Indiana Central:						Evensville and Crawfordsville:							
2d Mortgage.....	821,000	7	May & Nov.	New York.	1886	59	1st Mortgage of 1852.....	350,000	7	Jan. & July.	New York.	1869	...
Income Bonds.....	1,243,000	7	" "	" "	1881	...	1st Mortgage of 1854.....	740,000	7	May & Nov.	" "	1869	...
Columbus and Hocking Valley:						Rockville Extension 1st Mort. ....	150,000	7	Feb. & Aug.	" "	1881	...	
1st Mortgage.....	262,500	7	Jan. & July.	New York.	1897	...	Fall River, Warren & Providence:						
Consol. 2d Mortgage skg fund.	5,000,000	7	Feb. & Aug.	" "	1909	...	1st Mortgage.....	200,000	7	— & —	Providence.	18—	...
Columbus and Xenia:						Flemington:							
1st Mortgage for \$500,000.....	248,000	7	March & Sept.	Columbus.	1890	...	1st Mortgage guaranteed.....	100,000	6	— & —	Princeton.	18—	...
Connecticut and Passumpsic Riv.:						Flint and Pere Marquette:							
1st Mortgage sinking fund.....	500,000	6	June & Dec.	Boston.	1876	94	1st Mortgage.....	1,520,500	7	— & —	New York.	18—	...
Notes of '66 and '67, free.....	295,000	7	"	"	"76-77	100	Galena & Chic. Union (C.N. & W.):						
Connecticut River:						1st Mortgage.....	1,807,000	7	Feb. & Aug.	New York.	1882	90	
1st Mortgage.....	250,000	6	March & Sept.	Boston.	1878	98	2d Mortgage.....	1,985,000	7	May & Nov.	" "	1875	92
Connecting:						Georgia:							
1st Mortgage guaranteed.....	1,000,000	6	Jan. & July.	Philadelphia.	1896	83	Bonds.....	592,000	7	J. & J.	Augusta.	70 <sup>2</sup> -70	...
Cumberland and Pennsylvania:						Grand Rapids and Indiana:							
1st Mortgage for \$1,000,000.....	875,000	6	March & Sept.	New York.	1891	...	1st Mortgage.....	167,000	7	Jan. & July.	New York.	1886	...
2d Mortgage sinking fund.....	799,000	6	May & Nov.	" "	1885	...	Grand River Valley:						
Cumberland Valley:						1st Mortgage, guaranteed.....	1,000,000	7	Jan. & July.	New York.	1886	...	
1st Mortgage.....	161,000	8	April & Oct.	Philadelphia.	1904	...	Grand Trunk (Ca.):						
2d Mortgage.....	109,500	8	" "	"	1904	...	1st Preference Bonds.....	12,573,661	5*	Jan. & July.	London.	18—	...
Danbury and Norwalk:						2d Preference Bonds.....	7,355,986	5*	" "	" "	" "	...	
1st Mortgage.....	100,000	7	Jan. & July.	New York.	1880	...	3d Preference Stock.....	3,414,094	4*	" "	" "	18—	...
Danv., Urbana, Blooming. & Pekin:						4th Preference Stock.....	25,592,860	4*	" "	" "	" "	...	
1st Mortgage sinking fund.....	2,000,000	7	Jan. & July.	New York.	1908	...	Equipment Bonds.....	2,433,333	6*	April & Oct.	" "	18—	...
Dayton and Michigan:						Postal and Military bonds.....	5,840,000	var	Feb. & Aug.	" "	" "	...	
1st Mortgage sinking fund.....	2,802,000	7	Jan. & July.	New York.	1881	...	Great Western of Canada:						
2d Mortgage.....	642,000	7	March & Sept.	" "	1884	...	Government Loan £573,688.....	2,782,387	6*	— & —	Ottawa.	...	...
3d Mortgage.....	700,000	7	April & Oct.	" "	1888	...	Mortgage Bonds £615,200.....	2,983,720	6*	— & —	London.	73 <sup>2</sup> -76	...
Dayton and Union:						Mortgage Bonds £547,000.....	2,652,950	5*	— & —	" "	" "	...	
1st Mortgage, registered.....	149,000	7	March & Sept.	New York.	1879	...	Stock Debentures £46,700.....	226,500	5*	— & —	" "	77-78	...
2d Mortgage.....	135,000	7	June & Dec.	" "	1879	...	Great Western of Illinois:						
Income Bonds.....	252,445	6	" "	" "	1879	...	1st Mortgage (W. Div.):	1,000,000	10	April & Oct.	New York.	1868	105
Dayton and Western:						1st Mortgage (E. Div.):	45,000	7	Feb. & Aug.	" "	1888	...	
1st Mortgage.....	275,000	7	March & Sept.	New York.	1882	...	1st Mortgage (General):	1,455,000	7	" "	" "	89	...
2d Mortgage.....	463,000	6	Jan. & July.	" "	1905	...	2d Mortgage.....	2,500,000	7	May & Nov.	" "	1893	85
Delaware:						Greenville and Columbia:							
1st Mortgage.....	500,000	6	Jan. & July.	Philadelphia.	1875	...	1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1886	...
Guaranteed Bonds.....	100,000	6	" "	"	1875	...	Hannibal and St. Joseph:						
State Loan.....	170,000	6	" "	"	1876	...	Land Mortgage.....	1,900,000	7	April & Oct.	New York.	1881	105
Extension Mortgage.....	100,000	6	" "	"	1880	...	Convertible bonds.....	800,000	7	Jan. & July.	" "	1883	...
Delaware, Lackaw. & Western:						Eight per cent. Loan.....	860,000	8	" "	" "	1874	106	
1st Mort. (L. & W.) for \$900,000.....	564,000	7	Jan. & July.	New York.	1871	100	Ten per cent. Loan.....	1,000,000	10	" "	" "	1872	...
1st Mort. (East. Ext.) \$1,500,000.....	1,111,000	7	April & Oct.	" "	1875	99	1st Mort. (Quincy and Palmyra).....	500,000	10	" "	" "	1869	...
2d Mort. (General) for \$2,600,000.....	1,633,000	7	March & Sept.	" "	1881	94	1st Mort. (Kan. City & Cameron).....	1,200,000	10	" "	" "	1891	104
Des Moines Valley:						Harrisburg and Lancaster:							
1st Mortgage (on 154 miles).....	2,310,000	8	April & Oct.	New York.	1877	...	1st Mortgage, guaranteed.....	700,000	6	Jan. & July.	Philadelphia.	1883	95
Income Bonds.....	462,000	7	Jan. & July.	" "	1884	...	1st Mortgage.....	927,000	6	Jan. & July.	New York.	1873	95
Detroit and Milwaukee:						Hartford and New Haven:							
1st Mortgage, convertible.....	2,500,000	7	May & Nov.	New York.	1875	...	1st Mortgage.....	1st Mortgage.....					
2d Mortgage.....	1,000,000	8	" "	"	1875	...	2d Mortgage.....	481,000	7	Jan. & July.	Providence.	1876	...
1st Mortgage Funded Coupons.....	628,525	7	Jan. & July.	" "	1875	...	1st Mort. (Connecticut 96.04 m.).....	1,574,500	7	May & Nov.	Hartford.	1876	...
2d Mortgage Funded Coupons.....	377,115	7	May & Nov.	" "	1875	...	Hempfield:						
Bonds of June 30, 1866, (cond.).....	1,861,639	6	" "	"	1886	...	1st Mortgage.....	500,000	6	Jan. & July.	Philadelphia.	1872	...
Detroit, Mon. & Tol. (M.S. & N.I.):						Houstonian:							
1st Mortgage.....	924,000	7	Feb. & Aug.	New York.	1876	92	1st Mortgage.....	191,000	7	Jan. & July.	Bridgeport.	1877	...
Detroit and Pontiac (Detr. & Mil.):						2d Mortgage.....	100,000	7	" "	" "	" "	...	
1st Mortgage.....	100,000	7	Jan. & July.	New York.	1878	...	Houston and Texas Central:						
1st Mortgage.....	150,000	7	April & Oct.	" "	1878	...	1st Mortgage (L.G.) sinking fund.....	2,600,000	7*	Jan. & July.	New York.	1891	...
2d Mortgage.....	250,000	8	Feb. & Aug.	" "	1886	...	Hudson River:						
Dubuque and Sioux City:						1st Mortgage.....	1,936,000	7	Feb. & Aug.	New York.	1870	...	
1st Mortgage (1st Division).....	300,000	7	Jan. & July.	New York.	1883	96	2d Mortgage, sinking fund.....	2,000,000	7	June & Dec.	" "	1885	104
1st Mortgage (construction).....	680,000	7	" "	"	1894	...	3d Mortgage.....	183,000	7	May & Nov.	" "	1875	...
Sinking Fund (convertible).....	1,000,000	7	May & Nov.	" "	1888	...	Huntington and Broad Top Mt.:						
Dubuque Southwestern:						1st Mortgage.....	416,000	7	April & Oct.	Philadelphia.	1870	91	
1st Mortgage, preferred.....	100,000	7	Jan. & July.	New York.	1895	...	2d Mortgage.....	367,500	7	Feb. & Aug.	" "	1875	...
2d Mortgage, ordinary.....	450,000	7	" "	"	1895	...	Consol. Mortgage.....	887,045	7	April & Oct.	" "	1895	27
East Brandywine & Waynesburg:						Illinois Central:							
1st Mortgage.....	140,000	7	Feb. & Aug.	Philadelphia.	1882	...	Construction.....	3,187,500	7	April & Oct.	New York.	1875	106
East Pennsylvania:						Construction.....	332,000	6	" "	" "	" "	...	
1st Mortgage, Sinking Fund.....	508,900	7	April & Oct.	Philadelphia.	1888	...	Redemption.....	2,500,500	6	" "	" "	1890	...
East Tennessee and Georgia:						Redemption, sterling.....	2,500,000	6*	" "	" "	" "	...	
Tennessee Loan (old).....	1,037,000	6	Jan. & July.	New York.	1882	...	London:						
Tennessee Loan (1866).....	430,277	6	" "	"	1882	...	Illinois and Southern Iowa:						
Mortgage (old).....	640,000	6	" "	"	1880	...	1st Mortgage.....	300,000	7	Feb. & Aug.	New York.	1882	...
Mortgage (new).....	136,400	7	" "	"	1880	...	1st Mortgage.....	2,500,000	7	Jan. & July.	New York.	1886	70
East Tennessee and Virginia:						1st Mortgage.....	500,000	7	April & Oct.	" "	" "	...	
Tennessee Loan (old).....	1,599,000	6	Jan. & July.	New York.	1888	...	1st Mortgage.....	1,500,000	7	Jan. & July.	New York.	1888	...
Tennessee Loan (1866).....	600,000	6	" "	"	1888	...	1st Mortgage.....	612,000	7	May & Nov.	New York.	1891	...
Tennessee endorsed bonds.....	178,000	6	" "	"	18—	1st Mortgage.....	1,927,000	7	Jan. & July.	New York.	1885	...	
Eastern:						1st Mortgage.....	1,927,000	7	Jan. & July.	New York.	1885	...	
State Loan (1st Lien).....	275,000	5	J. A. J. & O.	Boston.	1882-72	...	1st Mortgage (Eldora R. R.):	272,000	7	Jan. & July.	New York.	1885	...
2d Mortgage, (convertible, sterling).....	420,000	5*	Jan. & July.	London									

## AMERICAN RAILROAD BOND LIST.

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An Asterick (\*) affixed to rate of interest signifies 'Payable in Coin.'

Description of Bonds.	Amount.	Rate	Interest Payable.			Description of Bonds.	Amount.	Rate	Interest Payable.		
			When.	Where.	Due.				When.	Where.	Due.
Junction, Philadelphia:											
1st Mortgage, guaranteed.....	800,000	6	April & Oct.	Philadelphia.	1896	89	Mobile and Montgomery:				
Kentucky Central:							1st Mortgage for \$2,500,000.....	\$.....	8*	May & Nov.	New York.
1st Mort. (Covington & Lexing.)	\$128,000	7	— & —	New York.	1873	...	1st Mortgage, Sterling.....	4,593,000	6*	May & Nov.	London.
2d Mortgage (do.).....	794,000	7	— & —	" "	1883	...	1st Mortgage, Sterling.....	8*	5*	" "	Mobile.
3d Mortgage (do.).....	237,000	7	— & —	" "	1885	...	Tennessee Loans.....	1,689,800	8	Jan. & July.	New York.
Keokuk and St. Paul:							Income of '61, '62, '65 and '67.	338,900	8	May & Nov.	Mobile.
1st Mortgage, sinking fund, conv.	400,000	8	May & Nov.	New York.	1879	99	Liquidation (10 year) bonds.....	556,421	8	" "	New York.
Knoxville and Charleston:							Interest bonds.....	697,900	8	" "	Mobile.
Tenn. State Loan.....	450,000	6	Jan. & July.	New York.	1898	...	Montgomery and Eufala:				
Knoxville and Kentucky:							1st Mortgage, endorsed by Ala.	129,000	8	March & Sept.	New York.
Tenn. State Loan (old).....	1,310,000	6	Jan. & July.	New York.	1890	...	Montgomery and West Point:				
Tenn. State Loan (new).....	800,000	8	" "	"	1898	...	Income Bonds.....	100,000	8	Jan. & July.	New York.
Lackawanna and Bloomsburg:							Income Bonds.....	300,900	8	" "	1876
1st Mortgage.....	900,000	7	Jan. & July.	New York.	1875	...	Mortgage Bonds.....	719,500	8	" "	1881
1st Mortgage (Extension).....	400,000	7	March & Sept.	Philadelphia.	1885	...	Morris and Essex:				
2d Mortgage.....	500,000	7	April & Oct.	"	1880	...	1st Mortgage, Sinking Fund....	5,000,000	7	May & Nov.	New York.
2d Mortgage (Extension).....	400,000	7	May & Nov.	"	1890	...	2d Mortgage.....	3,000,000	7	Feb. & Aug.	"
Lake Erie and Louisville:							Nashville and Chattanooga:				
1st Mortgage for \$1,600,000.....	500,000	7	Jan. & July.	New York.	1893	...	1st Mortgage, endorsed by Tenn.	1,589,000	6	Jan. & July.	New York.
Lawrence:							Tenn. State Loan.....	150,000	6	" "	1890
1st Mortgage.....	360,000	7	" "	Pittsburg.	1886	...	Tenn. Coupons Funded.....	426,270	6	" "	1892
Lehigh and Lackawanna:							Nashville and Decatur:				
1st Mortgage (tax free).....	200,000	7	Feb. & Aug.	Philadelphia.	1897	88	Tenn. State Loan.....	2,465,176	6	Jan. & July.	New York.
Lehigh Valley:							Income Bonds (Tenn. and Ala.)	205,000	10	April & Oct.	Nashville.
1st Mort. (exchangeable for new).....	1,262,000	6	May & Nov.	Philadelphia.	1873	100	2d Mortgage.....	500,000	6	" "	New York.
New Mortgage, free of taxes.....	1,917,000	6	June & Dec.	"	1898	98	Nashville and Northwestern:				
1st Mortgage (Hazleton).....	149,500	6	Jan. & July.	"	1878	96	Tenn. State Loan.....	2,672,000	6	Jan. & July.	New York.
Little Miami:							2d Mortgage.....	792,050	6	" "	"
1st Mortgage.....	1,489,000	6	May & Nov.	New York.	1893	...	Naugatuck:				
Cincinnati Loan.....	100,000	6	" "	Cincinnati.	1880	...	1st Mortgage, Convertible.....	166,000	7	Jan. & July.	Bridgeport.
Little Rock and Fort Smith:							Newark and New York:				
1st Mortgage for \$3,500,000.....	6*	.....		Boston	.....	1st Mortgage.....	600,000	7	Jan. & July.	New York.	
Little Schuylkill:							Newburg & New York (Oct. 1, '68):				
1st Mortgage, sinking fund.....	807,500	7	April & Oct.	Philadelphia.	1877	100	1st Mortgage.....	250,000	7	Jan. & July.	New York.
Long Island:							New Bedford and Taunton:				
1st Mortgage.....	500,000	6	Jan. & July.	New York.	1875	...	1st Mortgage.....	174,000	8	Jan. & July.	Boston.
Hunter's Point Extension.....	175,000	7	Feb. & Aug.	"	1890	...	New Brunswick and Canada:				
Glen Cove Branch.....	150,000	6	May & Nov.	"	1893	...	1st Mortgage, Sterling £220,000.	1,100,000	6*	May & Nov.	London.
Louisville, Cincin. and Lexington:							Newcastle and Beaver Valley:				
1st Mortgage for \$3,000,000.....	2,628,000	7	Jan. & July.	New York.	1897	...	1st Mortgage for \$150,000.....	125,000	7	May & Nov.	Philadelphia.
Louisville and Frankfort:							2d Mortgage for \$100,000.....	29,500	7	March & Sept.	"
1st Mortgage.....	88,000	6	Jan. & July.	New York.	'70-'78	...	New Haven and Darby:				
Louisville Loan.....	100,000	6	" "	"	1881	...	1st Mortgage.....	300,000	7	May & Nov.	New York.
Louisville and Nashville:							New Haven and Northampton:				
1st Mortgage, Main Stem.....	1,424,000	7	Jan. & July.	New York.	'69-'77	98	1st Mortgage.....	450,000	7	Jan. & July.	New Haven.
1st Mortgage, Memphis Branch.....	267,000	7	May & Nov.	"	'70-'75	96	1st Mort. (Hamp. & Hampd.)	200,000	6	April & Oct.	"
1st Mortgage, Bardstown Branch.....	27,500	7	Jan. & July.	"	1870	96	New Jersey:				
1st Mort. Lebanon Branch Ext.	88,000	7	May & Nov.	"	'80-'85	92	Company Bonds (var. issues)...	850,000	6	Feb. & Aug.	New York.
Louisville Loan, Main Stem.....	849,000	6	April & Oct.	"	'86-'87	92	New London Northern:				
Louisville Loan, Lebanon Br.....	225,000	6	May & Nov.	"	'88	96	1st Mortgage.....	60,000	7	Jun. & Dec.	New London.
Louisville Loan, Leb. Br. Ext.....	333,000	6	April & Oct.	"	1893	96	1st Mortgage, Extension.....	370,000	7	March & Sept.	"
Consolid. 1st mort. for \$8,000,000.....	2,000,000	7	" "	"	1898	90	New Mortgage.....	230,000	7	April & Oct.	New York.
Louisville, N. Albany & Chicago:							N. Orleans, Jackson & North.				
1st Mort. New Albany & Salem							1st Mortgage for \$3,000,000.....	2,741,000	8	Jan. & July.	New York.
Macon and Brunswick:							2d Mortgage for \$1,500,000.....	1,157,000	8	April & Oct.	"
1st Mort. endorsed by Georgia.....	140,000	7	Jan. & July.	New York.	1881	...	N. Orleans, Opelousas & Gt. Wt:				
Mahanoy and Broad Mountain:							1st Mort. construction (90 m.) ..	1,842,000	8	April & Oct.	New York.
1st Mortgage.....	250,000	6	Jan. & July.	Philadelphia.	1884	...	2d Mort. (F.) for \$1,000,000 (80 m.) ..	8	Jan. & July.	"	
Maine Central:							New York Central:				
\$1,100,000 Loan.....	1,095,600	6*	Feb. & Aug.	Boston.	'90-'91	99	Premium, Sinking Fund Bonds.	5,946,689	6	May & Nov.	New York.
\$400,000 Loan.....	307,700	6	June & Dec.	"	'70-'71	96	Funding, Sinking Fund Bonds.	1,514,000	7	Feb. & Aug.	"
Bangor City Loan.....	621,000	6	April & Oct.	"	1874	...	Bonds for B. & N. Falls R.R. Co.	76,000	6	May & Nov.	"
2d Mort. (Penob. & Ken. R. R.)	300,000	6	Feb. & Aug.	Bangor.	1870	...	Bonds for railroad stocks.....	592,000	6	" "	"
Marietta and Cincinnati:							Bonds for real estate.....	162,000	6	" "	"
1st Mortgage.....							Bonds and mortgages.....	58,215	7	various	"
1st Mortgage, Sterling.....	2,454,342	7	Feb. & Aug.	Baltimore.	1891	91	Convertible bonds.....	210,000	7	Feb. & Aug.	"
2d Mortgage.....	1,050,000	7	" "	London.	1891	...	Renewal bonds of 1868.....	2,900,000	6	June & Dec.	"
Schlot and Hocking Valley.....	2,500,000	7	May & Nov.	Baltimore.	1896	75	New York and Flushing:				
Memphis and Charleston:							1st Mortgage.....	125,000	7	— & —	New York.
Tenn. State Loan.....	1,817,937	6	Jan. & July.	New York.	1890	...	New York and Harlem:				
1st Mortgage, Convertible.....	1,263,000	7	May & Nov.	"	1880	...	1st Mortgage of 1863.....	3,000,000	7	May & Nov.	New York.
2d Mortgage.....	1,000,000	7	Jan. & July.	"	1885	...	Consolidated mortgage of 1863.	1,797,000	7	Feb. & Aug.	"
Memphis and Little Rock:							1st Mortgage.....	1,559,500	6	April & Oct.	New York.
Tenn. State, endorsements.....	445,000	6	Jan. & July.	New York.	1890	...	New York, Providence & Boston:				
Mortgage (road and land).....	1,300,000	8	May & Nov.	"	1890	...	1st Mortgage.....	280,000	6	Feb. & Aug.	New York.
Ark. State Loan.....	900,000	7	Jan. & July.	"	1897	...	Extension Bonds.....	250,000	6	May & Nov.	"
Michigan Central:							Norfolk and Petersburg:				
1st Mortgage, sterling.....	467,489	6*	Jan. & July.	London.	1872	...	1st Mortgage.....	110,500	7	Jan. & July.	New York.
1st Mortg. sterling, convertible	500,000	8*	March & Sept.	"	1869	...	1st Mortgage.....	303,000	8	" "	"
1st Mortgage, dollars, convertible	1,294,500	8	" "	New York.	1869	...	2d Mortgage for \$300,000.....	43,000	8	" "	Norfolk.
1st Mortgage, dollars, convertible	500,000	8	April & Oct.	"	1882	...	North Eastern:				
Consol. Sinking Fund Mortgage	4,207,000	8	" "	"	1882	120	1st Mortgage.....	700,000	7	March & Sept.	Charleston.
Michigan Southern & North. Ind.:							2d Mortgage for \$300,000.....	145,000	7	" "	"
1st Mortgage, Sinking Fund.....	6,728,000	7	May & Nov.	New York.	1885	101	North Missouri:				
2d Mortgage.....	2,693,000	7	" "	"	1877	97	1st Mortgage of 1865.....	6,000,000	7	Jan. & July.	New York.
Detroit, Monroe & Toledo Mort. Mifflin and Centre County:						2d Mortgage of 1868.....	4,000,000	7	April & Oct.	"	
1st Mortgage.....	172,500	6	April & Oct.	Philadelphia.	1885	...	North Pennsylvania:				
Milwaukee & Chicago, (40 miles).....							1st Mortgage.....	2,500,000	6	Jan. & July.	Philadelphia.
2d Mortgage, (C. & N. W. R. W.)	182,000	7	Jan. & July.	New York.	1874	...	Chattel Mortgage.....	360,000	10	April & Oct.	"
3d Mortgage, ( " " )	10,500	7	June & Dec.	"	1898	...	2d Mortgage.....	276,500	7	— & —	"
Milwaukee and St. Paul:							North Shore, L. L.:				
1st Mortgage, 370 miles.....							1st Mortgage.....	110,200	7	Jan. & July.	New York.
2d Mortgage.....	5,425,000	7	Jan. & July.	New York.	1893	93	Northern Central:				
1st Mortgage (P. du C.).....	1,390,000	7	April & Oct.	"	1884	86	1st Mortgage, guaranteed.....	1,500,000	6	J. A. J. & O.	Baltimore.
2d Mortgage (P. du C.).....	3,455,000	8	Feb. & Aug.	"	1898	104	2d Mortgage, Sinking Fund.....	2,500,000	6	Jan. & July.	"
1st Mort. (Iowa and Minn. Div.)	736,000	7,3	" "	"	1898	92	3d Mortgage, Sinking Fund.....	1,223,000	4	April & Oct.	"
Mississippi Central:						104	Consol. Mort. for \$6,000,000.....	1,874,000	6*	Jan. & July.	"
1st Mortgage.....	1,350,000	7	May & Nov.	New York.	1873	97	Northern New Hampshire:				
2d Mortgage.....	1,997,000	8	Feb. & Aug.	"	1876	...	Company Bonds of 1864.....	120,000	6	April & Oct.	Boston.
Mississippi and Tennessee:							1st Mortgage.....	400,000	7	Jan. & July.	"
1st Mortgage.....	600,000	7	April & Oct.	New York.	1876	...	2d Mortgage.....	458,500	6	Jan. & July.	New York.
2d Mortgage for \$1,300,000.....	939,000	8	Jan. & July.	"	1890	...	3d Mortgage (B. & O. R. R. Co.)	146,000	7	" "	"
Mobile and Girard:											
1st Mortgage Bonds.....	1,027,500	7	Jan. & July.	New York.	1877	...					

## AMERICAN RAILROAD BOND LIST.

An Asterick (\*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate.	Interest Payable.			Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.			Price.
			When.	Where.	Due.					When.	Where.	Due.	
North Carolina:													
Equipment Bonds of 1857.....	\$339,000	8	March & Sept.	Co.'s shops.	1867		Portland and Kennebec:			April & Oct.	Boston.	1883	
New Loan for \$800,000.....		8	"	"	1887		1st Mortgage.....	\$230,000	6	"	"	1895	
Norwich and Worcester:							Consolidated Bonds.....	300,000	6	"			
1st Mort. (Mass. Loan) skg fund	400,000	6	Jan. & July.	Boston.	1877		Pittsburg, Ft. Wayne & Chicago:						
Construction bonds.....	124,500	7	"	"	1877		1st Mortgage (Series A).....	875,000	7	Jan. & July.	New York.	1912	104
Steamboat mortgage.....	45,000	7	Feb. & Aug.	"	1870		1st Mortgage (Series B).....	875,000	7	Feb. & Aug.	"	1912	
Ogdensburg and Lake Champlain:							1st Mortgage (Series C).....	875,000	7	March & Sept.	"	1912	
1st Mort. conv. into pref. stock.	985,000	7	Jan. & July.	Boston.	1870		1st Mortgage (Series D).....	875,000	7	April & Oct.	"	1912	
Equipment Bonds.....	300,000	8	"	"	1870-78	100	1st Mortgage (Series E).....	875,000	7	May & Nov.	"	1912	
Ohio and Mississippi:							2d Mortgage (Series F).....	875,000	7	June & Dec.	"	1912	97
1st Mortgage, E. Div.....	2,050,000	7	Jan. & July.	New York.	1872	81	2d Mortgage (Series G).....	860,000	7	Jan. & July.	"	1912	
1st Mortgage, W. Div.....	850,000	7	"	"	1872	92	2d Mortgage (Series H).....	860,000	7	Feb. & Aug.	"	1912	
2d Mortgage, W. Div.....	556,000	7	"	"	1874		2d Mortgage (Series I).....	860,000	7	March & Sept.	"	1912	
Income, W. Div.....	221,500	7	April & Oct.	"	1882		2d Mortgage (Series K).....	860,000	7	April & Oct.	"	1912	
Consolidated Mort. for \$6,000,000	1,652,000	7	Jan. & July.	London.	1898	87	2d Mortgage (Series L).....	860,000	7	May & Nov.	"	1912	
Consolidated Mort. sterling.....	83,420	"	"	"			2d Mortgage (Series M).....	860,000	7	June & Dec.	"	1912	95
Oil Creek and Allegheny River:							3d Mortgage.....	2,000,000	7	April & Oct.	"	1912	
1st Mortgage.....	3,170,000	7	May & Nov.	Philadelphia.	1897	81	Bridge (O. & P. R. R.) bonds:	153,000	7	May & Nov.	"	1870	
Old Colony and Newport:							Playerville and Sacramento:						
Company Bonds.....	1,000,000	6	March & Sept.	Boston.	1876		1st Mortgage.....	225,000	10	Jan. & July.	San Francisco	1894	
Company Bonds.....	458,000	6	April & Oct.	"	1875	96	1st Mortgage.....	525,000	10*	"	"	1894	
Company Bonds.....	1,388,000	7	Feb. & Aug.	"	1877	103	Providence, Warren and Bristol:						
Orange, Alexandria & Manassas:							1st Mortgage.....	100,000	8	March & Sept.	Providence.	1872	
1st Mort. (Alex. to Gordonsville)	400,000	6	May & Nov.	New York.	1873		June & Dec.	"	8	"	"	1877	
2d Mort. (Charlotte to Lynchb.)	1,130,500	6	Jan. & July.	"	1875	82	Quincy and Toledo:						
3d Mort. "	573,500	8	"	"	1873	75	1st Mortgage.....	500,000	7	May & Nov.	New York.	1890	824
4th Mort. "	331,700	8	March & Sept.	Alexandria.	1882	82	Raritan and Delaware Bay:						
1st Mort. (general).....	705,000	7	Jan. & July.	New York.	1882	73	1st Mortgage, S. F. (68 m.).....	1,000,000	7	March & Sept.	New York.	1888	
Va. State Loan.....	249,962	6	"	"	1887	75	2d Mortgage.....	250,000	7	"	"	1888	
Osage Valley:							Equipment Bonds, convertible.....	296,000	7	"	"	1876	
1st Mortgage 5-20 years.....	200,000	10	Jan. & July.	New York.	1888		Reading and Columbia:						
Oswego and Rome:							1st Mortgage.....	650,000	7	March & Sept.	Philadelphia.	1882	
1st Mort. guar. by R. W. & O.	350,000	7	May & Nov.	New York.	1916		2d Mortgage.....	350,000	7	June & Dec.	"	1884	
Income.....	200,000	6	Feb. & Aug.	"	1891		Rensselaer and Saratoga:						
Oswego and Syracuse:							1st Mortgage (R. & S.).....	160,000	7	Jan. & July.	New York.	1873	
1st Mortgage.....	498,500	6	May & Nov.	New York.	1870-80		1st Mortgage (Sar. & Whitehall).....	400,000	7	March & Sept.	"	1888	
2d Mortgage.....	375,000	7	"	"	1885		1st Mort. (Troy, Salem & Rut.).....	500,000	7	May & Nov.	"	1890	76
Pacific of Mo.:							2d Mortgage (R. & S.).....	450,000	7	Jan. & July.	"	1870-87	
Mortgage, construction.....	1,500,000	7	Jan. & July.	New York.	1880		Richmond and Danville:						
St. Louis Loan.....	700,000	6	"	"	1871-73	96	Virginia State Loan.....	600,000	6	Jan. & July.	New York.	1878-88	
1st (new) Mortgage.....	7,000,000	6	Feb. & Aug.	New York.	1888	97	Bonds guaranteed by Virginia.....	161,600	6	"	"	1875-76	
Panama:							Consolidated, coupon.....	1,298,000	6	May & Nov.	"	1875-90	
1st Mortgage, Sterling.....	93,847	7*	April & Oct.	London.	1875		Rich., Frederickburg & Potowmac:						
2d Mortgage, Sterling.....	740,959	7*	Feb. & Aug.	"	1872		Company Bonds, sterling.....	67,778	6*	Jan. & July.	London.	1875	
General Mortgage, Sterling.....	2,899,330	7*	April & Oct.	"	1897		Company Bonds, dollar.....	172,800	7	"	Richmond.	1875	
Paterson and Newark:							Richmond and Petersburg:						
1st Mortgage guaranteed.....	500,000	7	Jan. & July.	New York.	1888		Company Bonds (coup. & reg.).....	130,500	7	June & Dec.	N. Y. & Rich.	1875	
Pemberton and Hightstown:							Company Bonds (coupons).....	175,000	8	March & Sept.	Philadelphia.	1870	
1st Mortgage endorsed.....	180,000	7	— & —	New York.	1877		Richmond and York River:						
Peninsular (Michigan):							1st Mortgage.....	600,000	8	— & —	New York.	18	
1st Mortgage for \$16,000 per m.	855,000	7*	May & Nov.	N. Y. & Lond.	1899	95	Roanoke Valley (R. & Dan.):						
Pennsylvania:							1st Mortgage.....	180,800	7	Feb. & Aug.	Richmond.	1870-76	
1st Mort. { Harrisb. to Pittsb. }.....	4,972,000	6	Jan. & July.	Philadelphia.	1880		Rockford, R. Island & St. Louis:						
2d M. sig. {	2,594,000	6	April & Oct.	"	1875	105	1st Mortgage, convertible, S.F. free.....	9,000,000	7*	Feb. & Aug.	N. Y. & Lond.	1919	96
General Mortgage.....	2,283,840	6	"	"	1875	101	Rome, Watertown & Ogdensb.:						
State lien on whole property.....	1,545,000	6	J. A. J. & O.	Philadelphia.	1910		1st Mortgage.....	1,384,000	7	— & —	New York.	18	
Short Bonds and Debentures.....	6,232,755	5	April & Oct.	Harrisburg.	1890		Rome, Watertown & Ogdensb.:						
Pennsylvania and New York:							1st Mortgage.....	571,000	7	June & Dec.	New York.	1891	100
1st Mortgage guaranteed.....	2,697,000	7	— & —	Philadelphia.	18		Sinking Fund (Watert. & Rome).....	757,500	7	March & Sept.	"	1880	
Pensacola and Georgia:							1st Mort. (Potsdam & Watert.).....	511,500	7	June & Dec.	"	1890-74	
1st Mortgage.....	1,185,300	7	Jan. & July.	New York.	18		Rutland and Burlington:						
1st Mortgage (Tallahassee R.R.).....	206,000	7	"	"	18		1st Mort. conv. into pref. stock.....	1,800,000	7	Feb. & Aug.	Boston.	1863	200
2d Mortgage.....	256,000	8	"	"	18		2d Mort. conv. into com. stock.....	937,500	7	"	"	1863	55
Peoria and Bureau Valley:							Sacramento Valley:						
1st Mortgage.....	600,000	8	Jan. & July.	New York.	18		1st Mortgage.....	400,000	10*	Jan. & July.	New York.	1875	
Peoria, Pekin and Jacksonville:							2d Mortgage.....	329,000	10*	Feb. & Aug.	Sacramento.	1881	
Perkiomen:							St. Joseph and Council Bluffs:						
1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1887		1st Mortgage (in Missouri 80 m.).....	1,400,000	10	March & Sept.	Boston.	1893	107
Perth Amboy and Woodbridge:							1st Mortgage (in Iowa 52 m.).....	150,000	10	"	"	1893	
1st Mortgage, guaranteed.....	100,000	6	— & —	New York.	18		2d Mortgage (in " ").....	500,000	7	— & —	"	1882	90
Philadelphia and Baltimore Cent.:							St. Louis, Alton and Terre Haute:						
1st Mortgage.....	575,000	7	Jan. & July.	Philadelphia.	1876		1st Mortgage (Series A).....	1,100,000	7	Jan. & July.	New York.	1894	95
Philadelphia and Erie:							1st Mortgage (Series B).....	1,100,000	7	April & Oct.	"	1894	
1st Mortgage (Sunbury & Erie).....	1,000,000	7	April & Oct.	Philadelphia.	1877	101	2d Mortgage preferred (Series C).....	1,400,000	7	Feb. & Aug.	"	1894	
1st Mortgage (General).....	5,000,000	6	"	"	1881	92	2d Mortgage preferred (Series D).....	1,400,000	7	May & Nov.	"	1894	
2d Mortgage.....	4,000,000	6	"	"	1901	85	2d Mortgage Income (Series E).....	1,700,000	7	"	"	1894	
3d Mortgage for \$3,000,000.....	600,000	7	Jan. & July.	"	1885	88	St. Louis and Iron Mountain.						
Philadelphia, German & Norist Convertible Loan.....	116,100	6	Jan. & July.	Philadelphia.	1882		1st Mortgage for \$4,000,000.....	3,000,000	7	Feb. & Aug.	New York.	1892	
Philadelphia and Reading:							St. Paul and Sioux City:						
Bonds of 1849.....	401,600	6	April & Oct.	Philadelphia.	1870	103	1st Mortgage.....	1,000,000	6*	Feb. & Aug.	New York.	1892	
Bonds of 1861.....	106,000	6	Jan. & July.	"	1871	97	St. Louis, Vandalia & T. Haute:						
Bonds of 1856-45-44-48 and 49.....	2,497,800	6	"	"	1880	95	1st Mortgage, S. F., guaranteed.....	1,900,000	7	Jan. & July.	New York.	1884	92
Bonds of 1857, convertible.....	171,500	6	"	"	1886	95	2d Mortgage, S. F., guaranteed.....	2,600,000	7	June & Dec.	"	1884	
Bonds of 1856, Sterling.....	182,400	5	"	"	1886	100	St. Paul and Chicago:						
Bonds of 1856, Sterling, conv.....	288,000	7*	"	"	1886	100	1st Mort. S. F. guar. for \$4,000,000.....	3,000,000	7	April & Oct.	New York.	1884	
Bonds of 1868 for renewals.....	477,500	6	April & Oct.	"	1893	83	St. Paul and Pacific 1st Division:						
Mort. bonds of '68, clear of taxes.....	2,255,000	7	"	"	1893	103	1st Mortgage (10 miles).....	120,000	8	March & Sept.	New York.	1892	
Philadelphia and Trenton:							1st Mort. (70 m.) & 2d M. (10 m.).....	700,000	7	Jan. & July.	"	1892	
1st Mort. (Camden & Amboy).....	200,000	6	May & Nov.	Philadelphia.	1868		2d Mortgage and Land Grant.....	1,200,000	7	June & Dec.	London.	18	
Philadelphia, Wilmington & Balt.:							General Mort. stg. for \$780,000.....	700,000	7	Jan. & July.	New York.	18	
Mortgage Loan, convertible													

## AMERICAN RAILROAD BOND LIST.

An Asterick (\*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.
			When.	Where.						When.	Where.		
Seaboard and Roanoke:							Vicksburg and Meridian:						
1st Mortgage.....	\$210,000	7	&	New York.	1880		Consolidated Mort.—1st class ..	\$72,500	7	Apr. & Oct or Jan. & Jul.	Philadelphia.	1890	...
Selma and Meridian:							" 2d class...	350,000	7		"	1890	...
1st Mortgage.....	79,878	...	&	&			" 3d class...	154,000	7		"	1890	...
2d Mortgage.....	52,000	...	&	&			" 4th class...	1,263,000	7		"	1890	...
3d Mortgage.....	665,000	...	&	&			Virginia and Tennessee:						
Selma, Rome and Dalton:							1st Mortgage.....	494,000	6	June & Dec.	New York.	1872	83
1st Mort. (Ala. and Tenn. River)	888,000	7	Jan. & July.	New York.	1872		2d Mortgage.....	23,500	6	" "	"	1868	73
2d Mort. (Ala. and Tenn. River)	241,100	8	" "	"	1864		3d Mortgage (Enlarged).....	990,000	6	" "	"	1884	...
Gen. Mort. (S.R.&D.) free of tax	5,000,000	7	April & Oct.	"	1887		Income Bonds.....	138,500	6	" "	"	1865	...
Shamokin Valley and Pottsville:							Funding Bonds (\$1,000,000).....	736,000	8	" "	"	1890	82
1st Mortgage.....	700,000	7	Feb. & Aug.	Philadelphia.	1872		Warren:						
Sheyboygan and Fond Lac:							1st Mortgage, guaranteed.....	511,400	7	Feb. & Aug.	New York.	1875	...
1st Mortgage.....	204,000	7	Feb. & Aug.	New York.	1884		Warwick Valley:						
Sioux City and Pacific:							1st Mortgage.....	85,000	7	April & Oct.	New York.	1880	...
1st Mortgage.....	1,828,320	7	April & Oct.	New York.	1898		Western Alabama:						
2d Mortgage (Gov. subsidy).....	1,628,320	6	Jan. & July.	"	1898		1st Mortgage, guar.....	500,000	7	April & Oct.	New York.	1888	...
Somerset and Kennebec:							West Wisconsin:						
1st Mortgage.....	300,000	6	June & Dec.	Augusta.	1874		1st Mort. Land Grant, stg. conv	1,000,000	7	Jan. & July.	London.	1884	...
2d Mortgage.....	250,000	6	" "	"	1876		West Chester and Philadelphia:						
Shore Line (N. H. & N. L.):							1st Mortgage, convertible.....	400,000	7	Jan. & July.	Philadelphia.	1873	95
1st Mortgage, reconstruction .....	55,000	7	March & Sept.	New Haven.	1880		2d Mortgage, registered.....	1,000,000	8	April & Oct.	"	1878	...
South Carolina:							West Jersey:						
Sterling Bonds £452,912 <sup>4</sup> .....	2,612,944	5*	Jan. & July.	London.	'71-'86		Loan of 1888 for \$400,000.....	400,000	6	March & Sept.	Philadelphia.	1883	90 <sup>4</sup>
Sterling Bonds £59,031 <sup>4</sup> .....	262,366	5*	" "	Charleston.	'71-'86		Loan of 1896 for \$1,000,000.....	983,500	6	Jan. & July.	"	1896	...
Domestic Bonds.....	418,016	6	" "	"	'73-'74		Western (Boston and Albany):						
Domestic Bonds.....	563,500	7	April & Oct.	"	'69-'72		Sterling Loans, £899,900.....	2,051,520	5*	April & Oct.	London.	'69-'71	...
Domestic Bonds.....	363,500	7	Jan. & July.	"	'88-'91		Dollar Bonds.....	702,000	6	" "	Boston.	1875	101 <sup>4</sup>
South and North Alabama:							Western Maryland:						
1st Mort. (\$10,000 p.m.) endorsed .....	8	—	—	New York.	1889		1st Mortgage, endorsed by Balt.	200,000	6	Jan. & July.	Baltimore.	1890	90
South Shore:							1st Mortgage unendorsed.....	400,000	6	" "	"	1890	76
South Side, Va.:							2d Mort. for \$300,000, end. by B.	300,000	6	" "	"	1890	88
2d Mort. guar. by Petersburg .....	300,000	6	Jan. & July.	Petersburg.	'70-'75		2d M. for \$300,000, end. by W.C.	300,000	6	" "	"	1890	80
3d Mort. (for City Point R. R.) .....	175,000	6	" "	"	'65-'68		Western Pennsylvania:						
4th Mortgage.....	317,000	6	" "	"	'70-'72		1st Mortgage, guaranteed.....	1,800,000	6	April & Oct.	Philadelphia.	1888	81 <sup>4</sup>
Consol. Mortgage.....		8	" "	New York.	'84-'90		Western Union:						
South Side, L. I.:							1st Mortgage for \$5,000,000 .....	4,000,000	7	Feb. & Aug.	New York.	1896	...
1st Mortgage.....	750,000	7	March & Sept.	New York.	1887	89 <sup>4</sup>	Whitehall and Plattsburg:						
South Western:							1st Mortgage.....	250,000	7	Jan. & July.	New York.	1873	...
South West Pacific:							Wicomico and Pocomoke:						
1st Mort. guar. by At&P & Pacific	2,000,000	6	Jan. & July.	New York.	1871		1st Mortgage.....	150,000	6	Jan. & July.	Philadelphia.	1888	...
Southern Minnesota:							Wilm., Charlotte & Rutherford:						
1st Mort. (10-20 yrs) \$20,000 p.m.							N. Cn. State Loan.....	2,320,000	6	Jan. & July.	New York.	'90-'92	...
Springfield and Columbus:							1st Mortgage guar. by State.....	8	" "	" "	"	1897	64 <sup>4</sup>
1st Mortgage.....	150,000	7	Jan. & July.	New York.	1871		Wilmington and Manchester:						
Statens Island:							1st Mortgage, 1st pref.....	725,000	7	June & Dec.	New York.	1886	...
1st Mortgage.....	200,000	7	Jan. & July.	New York.	1886		2d Mortgage, 2d pref.....	146,000	7	" "	"	1886	...
Sterling Mountain:							1st Mortgage, 3d pref.....	528,000	7	" "	"	1886	...
1st Mortgage.....	350,000	7	—	—	New York.	1874	2d Mortgage.....	30,000	7	May & Nov.	"	1873	...
Sullivan:							Wilmington and Weldon:						
1st Mortgage.....	500,000	6	Jan. & July.	Boston.	1875		1st Mortgage, Sterling.....	576,888	6*	Jan. & July.	London.	1881	...
2d Mortgage.....	250,000	6	Feb. & Aug.	"	1880		2d Mortgage, Sterling.....	197,777	7*	May & Nov.	"	1886	...
Syracuse, Binghamton and N. Y.:							Sinking Fund Mortgage.....	508,000	7	Jan. & July.	New York.	1896	89 <sup>4</sup>
1st Mortgage.....	1,720,000	7	April & Oct.	New York.	1876		York and Cumberland (N. Cent.):						
Summit Branch:							1st Mortgage.....	175,000	6	May & Nov.	Baltimore.	1870	88
1st Mortgage.....	528,000	6	—	—	Philadelphia.	1876	3d Mortgage.....	500,000	6	" "	"	1877	...
Sussex:							CANAL BONDS:						
Tioga:							Chesapeake and Delaware:						
1st Mortgage.....	200,000	6	—	—	New York.	18	1st Mortgage.....	2,254,000	7	Jan. & July.	Philadelphia.	1882	92
1st Mortgage.....	250,500	7	May & Nov.	Philadelphia.	1872	91	Chesapeake and Ohio:						
Toledo, Peoria and Warsaw:							State (Md.) Loan.....	2,000,000	6	J. A. J. & O.	Baltimore.	1870	91
1st Mortgage (E. Div.).....	1,600,000	7	June & Dec.	New York.	1894	55	Sterling, guaranteed.....	4,375,000	5*	" "	London.	1890	...
1st Mortgage (W. Div.).....	1,800,000	7	Feb. & Aug.	"	1896	80	Preferred Bonds.....	1,699,500	6	Jan. & July.	Baltimore.	1885	...
2d Mortgage (W. Div.).....	1,300,000	7	April & Oct.	"	1886	66 <sup>4</sup>	Delaware Division:						
Toledo, Wabash and Western:							1st Mortgage.....	800,000	6	Jan. & July.	Philadelphia.	1878	82
1st Mort. (Tol. Ill. 75 m.) .....	900,000	7	Feb. & Aug.	New York.	1890	91	2d Mortgage.....	531,000	7	March & Sept.	New York.	1870	...
1st M. (L. Erie, W. & St. L. 167 m.)	2,500,000	7	" "	"	1890		1st Mortgage (new).....	1,500,000	7	May & Nov.	"	1877	...
2d Mort. (Tol. & Wabash 75 m.)	1,000,000	7	May & Nov.	"	1878		Delaware and Raritan (See Can						
2d Mort. (Wab. & West. 167 m.)	1,500,000	7	" "	"	1871		Erie of Pennsylvania):						
Equipmt' Bonds (T. & W. 75m.)	600,000	7	" "	"	1883		1st Mortgage.....	673,798	7	Jan. & July.	Philadelphia.	1865	...
Consol. M. (T. W. & W. 499 m.)	2,532,000	7	F. M. A. & N.	"	1907		Interest Bonds.....	161,960	7	" "	"	18	...
Troy and Boston:							Ill. State bonds, sterling, coupon	767,222	6*	April & Oct.	London.	1870	...
1st Mortgage.....	300,000	7	Jan. & July.	New York.	1887		III. State bonds, sterling, reg.	500,967	6*	" "	"	1870	...
2d Mortgage.....	300,000	7	April & Oct.	"	1885		III. State bonds, stg. coup. & reg.	32,700	6*	" "	New York.	1870	...
3d Mortgage.....	650,000	7	May & Nov.	"	1875		III. State bds, cur. coup. & reg.	36,400	6	Jan. & July.	"	1870	...
Convertible Bonds.....	325,000	7	March & Sept.	"	1882		Lehigh Coal and Navigation:						
Troy Union:							1st Loan.....	384,162	6	J. A. J. & O.	Philadelphia.	1870	...
1st Mortgage, guaranteed.....	500,000	6	Jan. & July.	New York.	1873		2d Loan.....	5,606,122	6	" "	"	1884	82 <sup>4</sup>
2d Mortgage, guaranteed.....	360,000	6	" "	"	1878		3d Loan.....	2,000,000	6	" "	"	1887	...
Union Pacific:							Gold Loan.....	5,000,000	6*	June & Dec.	"	1897	89
1st Mortgage, free.....	27,237,000	6*	Jan. & July.	N.Y. & Boston	'95-'99		Convertible Loan.....	1,201,850	6	" "	"	1877	78 <sup>4</sup>
2d Mortgage (Gov. subsidy).....	27,236,512	6	" "	"	'95-'99		Monongahela Navigation:						
Land Grant bonds for 10,000,000	9,856,000	7	April & Oct.	N.Y. & Boston	'87-'89		1st Mortgage.....	125,000	6	Jan. & July.	Pittsburg.	1887	...
Income bonds.....	10,000,000	10	Mar. & Sept.	Boston.	'72-'74	82 <sup>4</sup>	2d Mortgage.....	57,000	6	" "	"	1887	...
Union Pacific—Central Branch:							Morris and Banking:						
1st Mortgage.....	1,600,000	6*	May & Nov.	New York.	1895		1st Mortgage.....	465,500	6	April & Oct.	Jersey City.	1876	83 <sup>4</sup>
2d Mortgage (Gov. subsidy).....	1,600,000	6	Jan. & July.	"	1895		2d Mortgage.....	302,750	6	" "	"	1876	76
Union Pacific—Eastern Division:							Boat Loan.....	232,087	6	" "	"	1886	77
1st Mortgage on 140 miles.....	2,240,000	6*	Feb. & Aug.	New York.	1895		North Branch:						
2d Mortgage (Gov. subsidy).....	4,083,000	6*	June & Dec.	"	1896		1st Mortgage.....	590,000	6	May & Nov.	Philadelphia.	1876	...
1st Mortgage on 254 miles.....	6,303,000	6	Jan. & June.	"	1896		2d Mortgage.....	465,500	6	" "	"	1876	83 <sup>4</sup>
2d Mortgage (Gov. subsidy).....	600,000	7	May & Nov.	"	1896		Boat Loan.....	302,750	6	" "	"	1876	76
1st Mort. (Leavenworth Br.) .....	600,000	7	March & Sept.	"	1896		Improvement Loan.....	232,087	6	" "	"	1886	77
Land Grant Mort. for \$500,000.	361,000	7	"	"</td									



JOURNAL											
Dec. 31, 1869 \$40.50	43.9	17	22,1452	Cleveland, <u>Co. C.</u> <u>Ind.</u> ... Ohio & Ind.	Ohio	2,922,346	387,981	... Cleveland and Mahoning ... Ohio	2,056,750	1,652,100	1,907,000
Jun. 30, 1869 47.0	12.4	63.6	... Cleveland and Pittsburgh ... Ohio & Penn.	6,300,475	3,882,500	... Cleveland and Pittsburgh ... Ohio & Ind. <u>Cent.</u>	13,000,000	18,814,000	610,497	20,770,915	95,180,050
Oct. 30, 1869 47.0	32.0	64.0	... Columbus and Xenia ... Ohio	2,034,200	2,283,225	... Columbus and Xenia ... Ohio	1,786,200	248,000	11,573	1,725,369	610,497
Mar. 31, 1869 35.0	7.0	13.0	... Concord ... New Hampshire	1,600,000	0	... Concord ... New Hampshire	1,600,000	0	109,086	274,507	610,497
Dec. 31, 1869 37.0	2.3	26.0	... Concord and Claremont, New Hampshire	92,010	1,500,000	... Concord and Claremont, New Hampshire	1,600,000	0	109,086	274,507	610,497
Mar. 31, 1869 41.0	3.2	11.0	... Columbus and Xenia ... Ohio	1,108,839	0	... Columbus and Xenia ... Ohio	1,108,839	0	11,573	163,938	610,497
Dec. 31, 1869 10.0	6.0	16.0	... Connecticut and Passumpsic Rv. ... Vermont	2,906,181	0	... Connecticut and Passumpsic Rv. ... Vermont	2,906,181	0	109,086	248,400	610,497
Nov. 30, 1869 6.0	3.4	12.6	... Connecticut River ... Massachusetts	2,674,423	0	... Connecticut River ... Massachusetts	2,674,423	0	109,086	248,400	610,497
Oct. 31, 1869 6.0	1.5	11.5	... Contoocook River ... New Hampshire	257,000	0	... Contoocook River ... New Hampshire	257,000	0	210,499	250,000	610,497
Dec. 31, 1869 34.0	19.0	31.0	... Cumberland and Pennsylvania, Maryland	3,300,000	0	... Cumberland and Pennsylvania, Maryland	3,300,000	0	607*	607*	610,497
Jun. 30, 1869 24.0	11.0	16.0	... Dayton and Union ... Ohio	698,084	0	... Dayton and Union ... Ohio	698,084	0	24,236	24,236	610,497
Oct. 31, 1869 23.5	3.2	12.0	... Dunbar and Norwalk ... Connecticut	478,766	0	... Dunbar and Norwalk ... Connecticut	478,766	0	110,000	110,000	610,497
Dec. 31, 1869 14.0	1.0	37.0	... Danz, Hazelton & Urbana ... Tenn.	15,000	0	... Danz, Hazelton & Urbana ... Tenn.	15,000	0	300,000	300,000	610,497
Mar. 31, 1869 14.1	1.6	117.6	... Dayton and Michigan ... Peoria Ill.	1,240,000	0	... Dayton and Michigan ... Peoria Ill.	1,240,000	0	215,000	215,000	610,497
Dec. 31, 1869 34.0	1.9	18.0	... Dayton and Union ... Ohio	687,658	0	... Dayton and Union ... Ohio	687,658	0	1,000,000	1,000,000	610,497
Jun. 30, 1869 24.0	1.0	16.0	... Delaware, Lack, and Western	1,232,000	0	... Delaware, Lack, and Western	1,232,000	0	24,236	24,236	610,497
Oct. 31, 1869 12.0	12.0	16.0	... Des Moines Valley and Wayne ... Penn.	1,256,000	0	... Des Moines Valley and Wayne ... Penn.	1,256,000	0	300,000	300,000	610,497
Dec. 31, 1869 18.0	3.6	21.0	... Detroit and Milwaukee ... Michigan	1,182,500	0	... Detroit and Milwaukee ... Michigan	1,182,500	0	22,880	22,880	610,497
Nov. 30, 1869 28.5	1.9	19.0	... Dover and Winnipisegoe ... New Hamp.	1,460,000	0	... Dover and Winnipisegoe ... New Hamp.	1,460,000	0	111,386	186,778	610,497
Dec. 31, 1869 14.5	6.1	7.5	... Dover and Winona ... Sioux City ... Iowa	1,168,000	0	... Dover and Winona ... Sioux City ... Iowa	1,168,000	0	1,000,000	1,000,000	610,497
Dec. 31, 1869 34.0	0.8	22.6	... DuBois and South Western ... Iowa	1,160,000	0	... DuBois and South Western ... Iowa	1,160,000	0	107,388	64,767	610,497
Sept. 30, 1869 41.0	5.0	56.0	... Dunlins, Warren & Pittsburgh ... N. Y.	1,000,000	0	... Dunlins, Warren & Pittsburgh ... N. Y.	1,000,000	0	280,000	280,000	610,497
Sept. 30, 1869 43.0	0.6	15.0	... Dutchess and Columbia Counties ... N. Y.	1,007,000	0	... Dutchess and Columbia Counties ... N. Y.	1,007,000	0	1,000,000	1,000,000	610,497
Oct. 31, 1869 46.8	0.3	11.0	... Elmira, Jefferson and Canandaigua ... N. Y.	284,806	0	... Elmira, Jefferson and Canandaigua ... N. Y.	284,806	0	2,500	2,500	610,497
Dec. 31, 1869 44.1	63.4	23.0	... Eastern Shore ... Massachusetts	674,862	0	... Eastern Shore ... Massachusetts	674,862	0	647,314	654,386	610,497
Oct. 31, 1869 38.5	1.9	19.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Dec. 31, 1869 33.7	3.5	16.2	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Oct. 31, 1869 38.0	0.8	17.1	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Dec. 31, 1869 130.0	6.7	20.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 162.0	0.6	19.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 130.0	9.6	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0	16.0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	... Emilia and Williamson ... Penn. & N. Y.	1,265,000	0	352,000	352,000	610,497
Jun. 30, 1869 12.0	12.0										

## RAILROAD SHARE LIST, including Mileage, Rolling Stock, Debts, Income, Dividends, &amp;c., &amp;c.

An asterisk (\*) occurring in the column headed "Rolling Stock" signifies that the cost thereof is included, in that headed "Railroad." A dash (—) across the column signifies "not ascertained." Land Grant Railroads are printed in "bold type." State and Railroads are distinguished by a "1."

## Abstract of General Balance Sheet.

Railroad.	Property and Assets.				Liabilities.				Operations.				Value of Shares.			
	Railroad.	Rolling Stock.	Assets.	Surplus Income.	Accounts.	Bonds.	Stocks.	Bonds.	Passenger.	Freight.	Gross.	Net.	Operations.	Earnings.	Market Par.	Dividends.
Oct. 31, 1869	M. M.	36 9 3	93	54,000	\$10,500	1,383,900	2,200,000	122,000	800	476,016	604,822	366,650	100	100	100	
Jun. 30, 1869	37.0	37.0	37.0	1,179,550	406,220	1,121,500	600,000	416,652	37.0	29,970	605,490	406,738	17,670	100	100	
Oct. 31, 1869	106.0	106.0	106.0	41,179,550	293,000	5,000,000	4,500,000	160,311	112,946,508	5,054,071	8	100	100	100	100	
Dec. 31, 1869	75.0	75.0	75.0	8,116	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	100	
Oct. 31, 1869	106.0	106.0	106.0	30,3	70.0	83,267	Lehigh Valley	100								
Oct. 31, 1869	101.0	101.0	101.0	98,512	192.4	133	13	13	13	13	13	13	13	13	100	
Nov. 30, 1869	6.6	6.6	6.6	2	2	16,309	18,481,241	4,606,418	16,309	1,943,839	4,678,500	209,622,474	1,286,591	50,118	100	
Dec. 31, 1869	16.0	16.0	16.0	0.6	2	2	16	16	16	241,200	42,600	25,980	880,706	33,823	4,277	
Jan. 30, 1870	84.2	84.2	84.2	1	1	296	Lexington and Big Sandy	100								
Jun. 30, 1869	119.8	119.8	119.8	47	38	20	70	70	70	600,000	1,480,000	1,480,000	1,480,000	1,480,000	100	
Oct. 31, 1869	28.3	28.3	28.3	2	10	10	10	10	10	1,146,283	1,146,283	1,146,283	1,146,283	1,146,283	100	
Dec. 31, 1869	9.0	9.0	9.0	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Sept. 30, 1869	94.0	94.0	94.0	18.0	22.0	21	41	9	24	1,222,163	401,311	156,741	50,718	2,427,183	100	
Jun. 30, 1869	98.5	98.5	98.5	77.6	14.7	23	23	23	23	2,649,018	871,750	870,500	1,868,468	1,868,468	100	
Nov. 30, 1869	186.0	186.0	186.0	66	45	76	76	76	76	20,000	600,000	600,000	1,025,000	1,025,000	100	
Dec. 31, 1869	186.0	186.0	186.0	124	23	23	23	23	23	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	11.0	11.0	11.0	11.0	11.0	11.0	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	10.0	10.0	10.0	10.0	10.0	10.0	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Nov. 30, 1869	186.0	186.0	186.0	11.3	11.3	11.3	11.3	11.3	11.3	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	7.1	7.1	7.1	7.1	7.1	7.1	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	4.1	4.1	4.1	4.1	4.1	4.1	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	47.8	38	20	70	70	70	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Dec. 31, 1869	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Jan. 30, 1870	186.0	186.0	186.0	12.0	22	22	22	22	22	1,186,397	1,186,397	1,186,397	1,186,397	1,186,397	100	
Oct. 31, 1869	186.0	186.0	186.0	12.0	22	22	22</									





**CITY PASSENGER RAILROAD SHARE AND BOND LISTS.**

## HORSE PASSENGER RAILROAD SHARE LIST

HORSE PASSENGER RAILROAD SHARE LIST

PASSENGER RAILROAD BONDS.

Years Pending.	Length equin. single track	Horses a' q Dummies	Cars. no.	COMPANIES.				COMPANIES.				Amount out- standing	Inter. & Rate	Pay- able.	Principa- lly Payable.	Market Price.		
				No.	No.	Cost of Road and Equipment.	Share Capital.	Indebtedness.	Earnings.	Value of Shares.								
Sept. 30, '69	7.25	94	14	Albany	N. Y.	150,309	99,800	40,000	5,000	\$ 78,817	21,467	100	100	100	7	18		
Nov. 30, '69	1.05			Albany st. Freight (B'ton). Mass.	49,749	150,000			4,377	3,404	100	100	100	7	1872			
Oct. 31, '69	3.41	11	4	Allentown	Pa.	27,739	30,314		11,900	9,089	2,372	100	100	100				
Dec. 31, '68	31.00	479	73	Baltimore City	Pa.					480,046	6	100	100	204				
Sept. 30, '69	62.00	400	50	Bleek. st. & F.F. (N.Y.C.) N.Y.	1,762,725	900,000	694,000	23,300	334,039	83,267	100	100	100	384				
Nov. 30, '69	2.56			Boston and Chelsea	Mass.	110,000	110,000			8,800	6	100	100	384				
Nov. 30, '69	3.06			Boston & West Roxbury	Mass.	41,000	41,000					100	100					
Sept. 30, '69	10.76	185	46	Broadway (Brooklyn)	N. Y.	302,050	200,000	100,000	11,206	126,662	29,881	80	100	100				
Sept. 30, '69	16.00	103	13	B'dway & 7th Av. (N.Y.C.) N.Y.	522,895	2,100,000	1,500,000	100,000	713,423	232,733	40	100	100					
Sept. 30, '69	7.00	28		Brooklyn, Bath & Coney I.N.Y.	179,780	100,000	80,000		30,153	Loss	100	100						
Sept. 30, '69	72.00	1321	271	Brooklyn City	N. Y.	1,957,420	1,500,000	300,000	85,000	282,132	327,466	12.0	100	100				
Sept. 30, '69	11.00	178	37	Brooklyn City & Newtown	N.Y.	600,000	596,000	4,000	34,438	134,615	21,999	100	100					
Sept. 30, '69	19.25	22	8	B'klyn Prop. F. & Flath.	N. Y.	537,944	261,400	278,000		72,720	5,718	100	100					
Sept. 30, '69	4.50			B'klyn Flath. & Coney Isl. N.Y.				10,000	100,000	(Not in operation.)	100	100						
Sept. 30, '69	15.21	180	51	Buffalo street	N. Y.	327,661	56,000	316,500	6,457	180,428	18,957	100	100					
Sept. 30, '69	11.50	87	13	Bushwick (Brooklyn)	N. Y.	307,348	242,200	2,000	20,056	76,650	Loss	100	100					
Nov. 30, '69	28.52			Cambridge (Boston)	Mass.	734,670	727,800	150,000	94		77,500	9.0	100	100	984			
Sept. 30, '69	1.76	20	4	Central City (Syracuse)	N. Y.	29,714	21,130	6,000		18,254	3,229	7.0	100					
Sept. 30, '69	36.00	731	125	Cen. P., N. & E. (N.Y.C.) N.Y.	1,627,021	1,068,400	626,000	76,052	588,724	13,997	100	100						
Oct. 31, '69	8.43	200	32	Citizens' (10th&11th sts.) (Ph.)	Pa.	179,635	192,750			240,293	81,318	36	50	19				
Oct. 31, '69	0.96	139		Citizens' (Pittsburg)	Pa.	234,427	184,000	50,000	7,700	145,568	38,078	19	50	44				
Sept. 30, '69	14.83	212	16	Coney Island (Brooklyn)	N. Y.	647,364	500,000	214,000	29,131	144,047	13,067	100	100					
Sept. 30, '69	27.79	608	107	Dry Dock, E.B. & B.(N.Y.C.) N.Y.	559,180	1,200,000	700,000			738,600	180,104	100	100					
Sept. 30, '69	3.50			Dunkirk and Fredonia	N. Y.	42,643	34,825			1,337	8,480	4,162	3	100	100			
Oct. 31, '69	1.64	12		Easton and S. Easton	Pa.	25,230	28,562				8,565	1,237	24	25	20			
Sept. 30, '69	19.00	851	157	Eighth Avenue (N.Y.C.) N.Y.	1,527,023	1,000,000	203,000			835,447	200,354	12.0	100	100				
Oct. 31, '69	2.26	18	4	Eric Cl'y	Conn.	32,915	18,550	17,272		12,444	2,749	50	9					
Sept. 30, '69	7.70	10		Fifth Ward (Syracuse)	N. Y.	45,301	29,285	10,000		10,403	456	100	100					
Sept. 30, '69	9.63	50		42d st. & Gr'd st. (F.N.Y.C.) N.Y.	1,052,479	748,000	260,000			376,903	112,240	10.0	100	100				
Oct. 31, '69	16.36	273	45	Frankford & Southwark (Ph.)	Pa.	762,441	491,750	198,000		308,158	61,719	61	50	49	384			
Sept. 30, '69	3.25	22	5	Genesee & Water st. (Syr.)	N.Y.	59,053	42,500	12,700	2,000	12,598	545	100	100					
Oct. 31, '69	34.25	66	59	Germantown (Phila.)	Pa.	562,270	307,545	350,000		348,021	123,493	19	50	15	284			
Oct. 31, '69	5.69	135		Girard College (Phila.)	Pa.	173,657	170,000			136,885	35,507	10	50	17	33			
Sept. 30, '69	8.00			Grand st. & Middle Vil. N.Y.	75,000	125,000	190,000			37,990	10,205	100	100					
Sept. 30, '69	5.50	90		Gr'd st. & Newtown (B'k'n) N.Y.	200,000	170,000	30,000			82,066	7,03	100	100					
Oct. 31, '69	5.03	19		Green and Coates st. (Phila.)	Pa.	239,746	100,000			176,078	39,959	7.0	50	15	39			
Sept. 30, '69	10.00	197		Harl'm Br. Morn. & F'dham	N.Y.	60,111	41,995	9,950	1,955	7,280	222	25	24					
Oct. 31, '69	2.14	11		Harrisburg City	Pa.						100	100						
Dec. 31, '68	9.00	19		Hartford & Wethersfield	Conn.	180,000	180,000				100	100						
Oct. 31, '69	14.10	339	59	Hest. Mant. & F'mount (Ph.)	Pa.	470,619	306,390	164,400	1,500	283,927	63,060	24	50	7	15			
Dec. 31, '68	2.50			Hoboken and Weehawken	N.J.						100	100						
Sept. 30, '68	2.50			Hudson Av. (Brooklyn)	N.Y.	161,535	106,700	74,000	9,272									
Dec. 31, '68	10.47			Jersey City & Bergen Point	N.J.						100	100						
Sept. 30, '69	8.36	27	9	Kingston and Rondout	N.Y.	77,494	75,000			22,390	2,405	100	100					
Oct. 31, '69	5.20	113	17	Lombard and South st. (Ph.)	Pa.	118,892	90,000	62,500	11,462	75,378	6,258	25	9					
Nov. 30, '69	4.04	49	49	Lowell Horse	Mass.	70,000	55,830			31,469	6,385	2.0	100	100	36			
Nov. 30, '69	12.61	225	33	Lynn and Boston	Mass.	274,331	200,000	50,000	41,952	166,752	14,010	100	100	20				
Nov. 30, '69	3.75			Malden and Melrose (B'tn.)	Mass.	60,264	49,224				100	100						
Nov. 30, '69	1.00			Marginal Freight (Boston)	Mass.	190,646	119,000			33,636	13,679							
Nov. 30, '69	3.34	39		Medford & Charlest. (B'tn.)	Mass.	36,600	21,000	4,500			100	100						
Nov. 30, '69	5.11			Merrimac Valley	Mass.	42,468	50,000			6,201	28,732	Loss	100	100	30			
Sept. 30, '68	6.00	58		Metropolitan (Brooklyn)	N.Y.	361,500	194,000	191,900	7,000	34,108	6,209	100	100					
Nov. 30, '69	44.18	914	170	Metropolitan (Boston)	Mass.	1,594,493	1,250,000			233,457	821,332	134,567	16.0	100	69			
Nov. 30, '69	7.12	244	49	Middlesex (Boston)	Mass.	529,202	400,000	90,038	43,331	229,090	28,123	3.0	100	100	71			
Sept. 30, '69	12.00	172	33	Ninth Avenue (N.Y. City) N.Y.	474,198	197,320	167,000			110,179	3,330	100	100					
Nov. 30, '69	3.31	16		Northampton & W'mburg	Mass.	300,000	300,000			2,608	9,757	Loss	100	100				
Nov. 30, '69	2.11	7		North Woburn (Boston)	Mass.	27,562	20,000	8,000	4,090	6,772	1,312	100	100					
Oct. 31, '69	7.25	81	14	Oakland & E. Liberty (Pbg.)	Pa.	118,892	59,500	17,000	160,000	169,163	47,781	8,462	50	50				
Dec. 31, '69	17.29	167	22	Orange and Newark	N.J.	800,000	300,000	500,000		169,088	29,747	100	100					
Dec. 31, '68	3.81			Passenger (Cin.)	Pa.	100,000	100,000				100	100						
Oct. 31, '69	9.64	32	9	Peoples' street (Scranton)	Pa.	126,001	125,230			27,721	8,213	5	100	100				
Oct. 31, '69	7.07	292	46	Philadelphia City (C. & W.)	Pa.	446,265	225,000	200,000	21,265	255,316	80,754	20	50	15	44			
Oct. 31, '69	5.65	124	23	Philadelphia and Darby	Pa.	258,419	200,000	57,000		40,434	13,645	8	20	12				
Oct. 31, '69	12.88	47	47	Philadelphia & Gray's Ferry	Pa.	295,001	285,307	5,500		86,642	26,385	8	50	25				
Oct. 31, '69	8.25	128	28	Pbg., Allegheny & Manches. Pa.	Pa.	144,119	23,000	24,000	2,433	134,684	40,053	61	50	35				
Oct. 31, '69	5.20	80	15	Pittsburg and Birmingham	Pa.	114,661	88,000	10,000	44,931	81,702	9,069	6	50	44				
Dec. 31, '68	6.88			Portland	Me.	160,300	160,300			600	45,007	12,809	7	100	100			
Oct. 31, '69	8.00	51	12	Ridge Av. & Manayunk	Pa.	179,635	120,500	63,300		41,495	9,677	50	25	7				
Sept. 30, '69	10.00	72	20	Rochester and Brighton	N.Y.	34,954	60,000	15,000		7,208	34,015	Loss	100	100	12			
Sept. 30, '69	3.00	53	13	Rockefeller and Bergen st.	N.Y.	361,500	194,000	7,000		18,385	3,385	Loss	100	100				
Nov. 30, '69	9.58	50	11	Salem and Danvers	Mass.	192,000	150,000	35,600	15,354	41,144	3,997	100	100					
Oct. 31, '69	3.48	135	18	Schuykill River (Phila.)	Pa.	47,463	50,000			14,149	232,076	41,484	8	100	100	624		
Sept. 30, '69	16.00	634	96	Second Avenue (N.Y. City) N.Y.	1,914,447	810,700	1,015,000			527,472	108,834	100	100					
Oct. 31, '69	34.00	502	72	2d and 3d street (Phila.)	Pa.	640,529	57,387	10,000	401,156	69,532	10	50	30	504				
Oct. 31, '69	5.62	127	19	17th and 19th street (Phila.)	Pa.	119,668	160,000			7,408	105,467	29,407	10	50	16	21		
Sept. 30, '69	8.38	648	78	Sixth Avenue (N.Y. City) N.Y.	1,510,233	750,000	250,000		713,499	104,691	10	100	100	125				
Nov. 30, '69	3.85			Somerville (Boston)	Mass.	75,000					4,500	6	100	100				
Nov. 30,																		

## PREFERRED &amp; GUARANTEED STOCKS

(Marked with an asterisk (\*) are guaranteed by lessees and thus (†) have equal dividends with lessees' stock.)

COMPANIES.	Amount outstanding.	Div'ds	Div'ds	Market Price.
	Rate.	Paid	Rate.	
<b>RAILROAD STOCKS:</b>				
Atlantic & Gt. West'n (O. D.) pref.	\$1,919,000	7	...	
Atlantic and St. Lawrence* guar.	2,494,000	4	4	
Baltimore and Ohio, pref.	3,000,000	6	6	
Berkshire, * guaranteed.	600,000	7	7	
Blossburg and Corning, * guar.	250,000	5	5	
Boston, Concord and Montreal, pref.	1,340,000	6	6	75
Buffalo, N. York and Erie, * guar.	950,000	7	7	74
Camden and Atlantic, pref.	600,000	7	7	
Catawissa, * pref. and guar.	2,200,000	7	7	77
Cayuga and Susquehanna, * guar.	589,110	...	9	
Cedar Rapids & Missouri, * preferred and guaranteed.	755,000	7	7	
Central Illino., preferred.	400,000	7	7	29
Chemung, * guar.	380,000	8	6	
Cheshire, preferred.	2,017,815	7	3	334
Chicago and Alton, pref.	2,425,000	7	10	1164
Chicago, Iowa and Nebraska, * guar.	2,600,000	...	10	
Chicago and Northwestern, pref.	20,370,293	7	7	88
Cleveland and Mahoning, * guar.	2,056,000	7	7	
Cleveland and Toledo, * * guar.	6,250,000	3	...	
Cochecho, preferred.	177,750	8	...	
Connecticut and Passaic River, preferred.	1,822,100	6	6	84
Cumberland Valley, 1st pref.	241,900	8	8	114
Delaware, * guaranteed.	242,000	8	8	
Detroit & Milwaukee, * preferred and guaranteed.	594,261	6	6	
Dubuque and Sioux City, * preferred and guaranteed.	1,500,000	6	...	
Dubuque Southwest, pref.	1,988,170	7	7	97
Eastern (N. H.) * guaranteed.	330,308	7	7	
Elmira, Jefferson and Canandaigua, * guaranteed.	492,500	8	8	
Elmira and Williamsport, * guar.	500,000	5	5	
Elmira and Williamsport, * preferred and guaranteed.	500,000	5	5	
Erie, preferred.	8,536,910	7	7	49
Evansville and Crawfordville pref.	100,000	...	...	
Hannibal and St. Joseph, pref.	5,253,836	...	116	
Harrisburg and Lancaster, * guar.	1,182,550	7	7	
Housatonic, preferred.	1,180,000	8	99	
Huntingdon & Broad Top Mountain, preferred.	190,750	7	38	
Joliet and Chicago, * guar.	1,500,000	7	7	
Joliet and Northern Indiana, * guar.	300,000	8	8	
Lackawanna and Bloomsburg, pref.	500,000	7	5	
Leeds and Farmington, * guar.	2,646,100	7	7	
Louisville, Cincinnati and Lexington, preferred.	848,703	9	9	99
Marietta and Cincinnati, 1st pref.	6,556,135	6	...	19
" " 2d pref.	4,051,744	6	...	8
Manchester and Lawrence.	1,000,000	...	9	
Michigan Southern, guaranteed.	586,800	10	10	
Mill Creek and Mine Hill, * guar.	323,375	10	10	
Milwaukee and St. Paul, preferred.	9,744,268	7	...	81
Mine Hill and Schuylkill Haven, * guaranteed.	3,775,000	8	8	
Mount Carbon & Pt. Carbon, * guar.	232,250	12	12	
New Haven and Northampton.	1,344,000	...	...	
New York and Harlem, pref.	1,500,000	8	8	134
Niagara Bridge and Canandaigua, * guar.	1,000,000	6	...	
North Eastern (S. C.) preferred.	155,000	8	8	84
Ogdensburg and L. Champlain, pref.	1,037,000	8	8	1084
Ohio and Mississippi, pref.	3,500,000	7	7	74
Paterson and Hudson, * guar.	630,000	8	8	
Peoria and Bureau Valley, * guar.	248,000	5	5	
Philadelphia and Erie.	1,200,000	6	...	
Philadelphia and Reading, pref.	5,996,700	...	...	
Philadelphia and Trenton, * * guar.	1,551,800	10	...	
Pittfield and North Adams, * guar.	1,099,120	10	...	
Pottl. & Kennebec (Yarmouth) guar.	450,000	6	...	
Portland, Sago & Portsmouth, * guar.	2,024,000	6	...	
Portsmouth and Concord*.	1,500,000	6	...	
Richmond, Fredericksb. & Potomac, guaranteed.	350,000	7	7	
Rochester and Genesee Valley*.	142,900	7	7	
Rutland, preferred.	557,560	7	7	
St. Louis, Alton and T. H., pref.	2,040,000	7	5	56
Sandusky and Cincinnati, pref.	445,596	6	6	364
Schuylkill Valley, * guar.	576,000	5	5	
Shanokin Valley & Pottsville, * guar.	869,450	5	5	
Tol. Peoria & Warsaw (W. D.) pref.	1,300,000	7	...	
" " " (E. D.) pref.	1,700,000	7	...	
Toledo, Wabash and Western, pref.	1,000,000	7	7	78
Troy and Greenbush, * guar.	274,000	7	7	
Vermont and Canada, * guar.	2,500,000	8	8	
Warren, * guar.	1,408,300	7	7	
White Mountains, * guar.	200,000	5	5	
Wrightsv., York & Gettysburg, * pref.	317,060	...	2	
<b>CANAL STOCKS:</b>				
Delaware Division, * guar.	1,633,350	8	8	...
Morris, preferred.	1,175,000	10	10	674
Schuylkill Navigation, pref.	2,888,997	6	32	
Union, preferred.	6	...	2	
<b>MISCELLANEOUS STOCKS:</b>				
Clumberland Coal, pref.	...	6	...	32
Mariposa Mining, pref.	5,774,400	7	7	84

WHOLESALE PRICE CURRENT.				
IRON—DUTY: Bars, 1 to 1½ cents per lb.; Railroad, 70 cents per 100 lb.; Boiler and Plate, 1½ cents per lb.; Sheet, Band, Hoop and Scroll, 1½ to 1¾ cents per lb.; Pig, \$9 per ton; Polished, 3 cents per lb.				
Pig, Scotch, No. 1.	per ton.	33	...	36
Pig, American, No. 1.	—	—	32	
Pig, American, No. 2.	—	—	31	
Pig, American, Forge.	27	—	29	
Bar, Refined, English and American.	—	—	75	
Bar, Swedes, assorted sizes.	(gold)	85	...	100
STORE PRICES.				
Bar, Swedes, ordinary sizes.	—	—	110	
Bar, Refined.	80	—	85	
Bar, Common.	75	—	80	
Scroll.	97	50	130	
Ovals and Half-round.	100	—	125	
Band.	95	—	—	
Horse Shoe.	95	—	—	
Rods, 1/8-1/4 inch.	85	—	120	
Hoop.	105	—	150	
Nail Rod.	per lb.	7	—	74
Sheet, Russia, as to No.'s.	(gold)	11	—	114
Sheet, Single D. and T. Common.	—	44	—	6
Rails, English.	—	57	—	59
Rails, American, at Works in Penna., c'y.	70	—	71	
Anvils, (Eagle).	—	8	—	
STEEL—DUTY: Bars and Ingots, valued at 7 cents per lb., or under, 24 cents; over 7 cents and not above 11, 3 cents per lb.; over 11 cents, 3½ cents per lb., and 10 per cent. ad val. (Store prices.)	—	—	—	
English, Cast, (2d and 1st quality).	per lb.	15	—	18
English, Spring (2d and 1st quality).	—	7	—	10
English, Blister (2d and 1st quality).	—	10	—	17
English, Machinery.	—	11½	—	14
English German (2d and 1st quality).	—	13	—	15
American Blister "Black Diamond".	—	—	12	
American, Cast, Tool, do.	—	—	17	
American, Spring, do.	—	9	—	11
American, Machinery, do.	—	—	12	
American German, do.	—	9	—	12
NAILS—DUTY: Cut, 1½; Wrought, Horse Shoe, 2½ cents per lb. (Cash.)	—	—	—	
Cut, 4d. @ 10d.	—	per 10 lb.	4 37½	4 50
Clinch.	—	—	5 87½	6
Horse Shoe, Forged (No. 10 to 6).	—	per lb.	23	—
Copper.	—	—	—	37
TIN—DUTY: Pig, Bars and Block, 15 per cent. ad val.; Plate and Sheets and Terne Plates, 25 per cent. ad val.	—	—	—	
Barca.	(gold).	per lb.	—	—
Straits.	(gold).	—	31½	—
English.	(gold).	—	31½	—
Plates—Fair to good brands.	—	Gold.	—	Currency.
I. C. Charcoal.	per box.	8 25	—	8 87½
I. C. Coke.	—	7 25	—	8 50
Coke Terne.	—	5 65	—	6 75
Charcoal Terne.	—	7 50	—	9 90
PETROLEUM—DUTY: Crude, 20 cents; Refined 40 cents per gallon.	—	—	—	
Crude, 40 @ 48 gravity (in bulk).	per gall.	12	—	—
Crude, 40 @ 47 gravity (in shipping order).	—	16	—	16½
Refined, prime L. S. to W. (110 @ 115 test).	—	23	—	—
Refined, Standard White (in ship'g order).	—	24	—	—
Refined, prime White (in shipping order).	—	26	—	—
Refined, S. W. (in jobbing lots).	—	—	—	
Refined, S. W. (in tin).	—	27½	—	28
Naphtha, Refined, (65 @ 73 gravity).	—	9	—	—
Residuum.	—	per bbl.	4	—
GLASS—DUTY: Cylinder or Window Polished Plate, not over 10 by 15 inches, 2½ cents per sq. foot; larger and not over 16 by 24 inches, 4 cents per sq. foot; larger and not over 24 by 30 inches, 6 cents per sq. foot; above that, and not exceeding 24 by 60 inches, 20 cents per sq. foot; all above that, 40 cents per sq. foot; on unpolished Cylinder, Crown and Common Window, not exceeding 10 by 15 inches square, 1½; over that, and not over 16 by 24, 2; over that, and not over 24 by 30, 2½; all over that, 3 cents per lb.				
American Window.	(Single Thick.)	(Old List.)		
1st.	2d.	3d.	4th.	
Size.	A.	B.	C.	D.
6 by 8 to 7 by 9.	\$7	75	\$7	00
8 by 10 to 10 by 15.	8	25	7	50
11 by 14 to 12 by 18.	9	75	9	00
14 by 16 to 16 by 24.	10	50	9	50
18 by 22 to 18 by 30.	12	25	11	50
20 by 30 to 24 by 36.	15	00	13	75
24 by 31 to 24 by 36.	16	50	15	00
25 by 36 to 30 by 44.	17	50	16	00
30 by 46 to 32 by 48.	20	00	18	00
32 by 50 to 32 by 56.	22	00	20	00
Above.	25	00	25	00
(The above subject to a discount of 55@60 per cent.)				
French Window—1st, 2d, 3d and 4th qualities.	(Single Thick.)	(New List, Aug. 20th.)		
6 by 8 to 8 by 10.	per 50 feet.	10	—	75
8 by 11 to 10 by 15.	(4 qts.)	10	50	8
11 by 14 to 12 by 18.	(4 qts.)	12	—	925
14 by 16 to 16 by 24.	(4 qts.)	12	50	975
18 by 22 to 18 by 30.	(4 qts.)	15	—	1050
20 by 28 to 24 by 30.	(4 qts.)	18	50	1250
26 by 34 to 26 by 40.	(3 qts.)	21	50	1650
28 by 38 to 28 by 44.	(3 qts.)	22	—	1650
28 by 46 to 30 by 48.	(3 qts.)	23	—	1750
30 by 50 to 32 by 52.	(3 qts.)	24	50	1850
32 by 54 to 34 by 56.	(3 qts.)	26	50	1950
34 by 58 to 34 by 60.	(3 qts.)	30	—	2250
36 by 60 to 40 by 60.	(3 qts.)	36	—	2825
(Subject to a discount of 55@60 per cent.)				
English sells at 40@50 per cent. off the above rates.				

New York Stock Exchange.				
Actual Sale Prices for the week ending Nov. 2.				
Th. 27.	F. 28.	Sat. 29.	M. 31.	Tu. 1. W. 2.
Canton Co.	68	...	67½	...
Central Pacific 6s.	90	90	91	91
Central of N. Jersey.	108	108	107	109
Chicago & Alton.	115	115	115	116
...	pref.	116	...	
...	1 M.	...	102	...
...	S. F.	...	102	...
...	Inc. bds.	...	102	...
Chicago, Burl. & Q. 151	151	151	151	151
8s. 1883	...	...	...	...
Chic. & Northwestern.	80	79	80	80
...	pref.	88	87	88
...	1st M.	...	88	88
...	S. F.	...	88	88
Chic., Rock Isl. & Pac.	110	109	110	108
Chi., R. I. & Pa. 7s. 1890	96	97	97	97
Clev., Col. C. and Ind.	81	81	81	81
Clev. and Pittsburgh.	104	104	105	107
...	2 M.	...	106	107
...	3 M.	...	107	108
...	4 M.	...	108	109
...	5 M.	...	109	110
Cumberland Coal pref.	...	...	...	...
Del. & Hudson Canal.	120	120	120	120
Del. Lack. & Western.	108	108	109	109
...	1 M. 7s.	...	109	

## New York Stock Exchange.

Actual Sale Prices for the week ending Nov. 2.

Th.27.F.28.Sat.29.M.31.Tu.1. W.2

## FEDERAL STOCKS:—

U. S. 5s, 1871, reg.	106	106	106	106	106
U. S. 5s, 1871, coup.	107	107	107	107	107
U. S. 5s, 1874, reg.	107	107	107	107	107
U. S. 5s, 1874, coup.	107	107	107	107	107
U. S. 5s, 10-40s, coup.	106	106	106	106	106
U. S. 5s, 10-40s, reg.	106	106	106	106	106
U. S. 6s, 1881, reg.	113	113	113	113	113
J. S. 6s, 1881, coup.	113	113	113	113	113
U. S. 6s, '81, O.W.L.y.	108	108	108	108	108
U. S. 6s, 1881, .. 1y.	108	108	108	108	108
U. S. 6s, 5-20s, reg. '92.	108	108	108	108	108
U. S. 6s, 5-20s, c. 1862. 112	112	112	109	109	109
U. S. 6s, 5-20s, reg. '64.	107	107	107	107	107
U. S. 6s, 5-20s, c. 1864. 111	111	111	107	107	107
U. S. 6s, 5-20s, reg. '65.	111	111	111	111	111
U. S. 6s, 5-20s, c. 1865. 111	111	111	108	108	108
U. S. 6s, 5-20s, r. n. '65. 110	110	110	110	110	110
U. S. 6s, 5-20s, c. '65. 110	110	110	110	110	110
U. S. 6s, 5-20s, reg. '67. 110	110	110	110	110	110
U. S. 6s, 5-20s, c. 1867. 110	110	110	110	110	110
U. S. 6s, 5-20s, reg. '68.	110	110	110	110	110
U. S. 6s, 5-20s, c. '68. 110	110	110	110	110	110
U. S. 6s, Pac.R.R. issue.	111	111	111	111	111

## Philadelphia Stock Exchange.

Actual Sale Prices for the week ending Nov. 1.

W.26.Th.27.F.28.Sat.29.M.31.Tu.1

Catawissa					
.. preferred	38	38	38	38	38
Camden and Amboy	116	116	115	115	115
.. 6s, 1870					
.. 6s, 1875					
.. 6s, 1883					
.. 6s, 1889	92	92	92	92	92
.. mort. 6s, '89 97	97	97	97	97	97
Elmira & Williamsport					
.. pref.					
.. 7s.					
Lehigh Navigation	32	31	31	31	31
.. 6s, 1884	82	82	82	82	82
.. Gold L.	88	88	88	88	88
.. R. R. L.	88	88	88	88	88
Lehigh Valley R. R.	58	58	58	58	58
.. 6s new coup	98	98	98	98	98
.. 6s new reg.	99	99	99	99	99
Little Schuylkill R.R.	48	42	42	42	42
.. 7s.					
Minehill	51	51	51	51	51
Morris Canal					
.. pref.					
.. 1st mort.					
North Pennsylvania					
.. 6s, 1880					
.. 7s.					
.. 10s, 1887					
Northern Central	42	42	42	42	42
Pennsylvania R. R.	60	60	60	60	60
.. 1st M.					
.. 2d M.					
Penn. State, 6s, 1st series					
.. 6s, 2d series	105	105	105	105	105
.. 6s, 3d series					
.. 6s, W. L.	104	104	104	104	104
Philadelphia City, 6s, .. 102	101	102	102	102	102
.. new.	102	102	102	102	102
Philad., Germ. & Nor.					
Phila. & Reading	50	50	49	50	50
.. 7s. 1893					
Philadelphia and Erie	26	26	26	26	26
.. 6s					
.. 7s.	88	88	88	88	88
Schuylkill Navigation					
.. pref.					
.. 6s, 1882					
.. 6s, 1876					
.. 6s, 1872					
Susq. Canal					
.. 6s, 1878					
Union Canal, pref.					
.. 6s, 1878.					
Hestonville, (Horse.)					
Chestnut & Wal.	44	44	44	44	44
Green & Coates					
2d and 3d streets					
Spruce and Pine					
13th and 15th sts.	26	26	26	26	26

## Baltimore Stock Exchange.

Actual Sale Prices for the week ending Nov. 1.

W.26.Th.27.F.28.Sat.29.M.31.Tu.1

Baltimore City 6s, 1875	91	91	91	91	91
.. 1886	92	92	92	92	92
.. 1890	92	92	91	91	91
.. 1884					
Balt and Ohio					
.. bonds, 1875					
.. 1880					
.. 1885	92	92	92	92	92
Marietta & Cln. 1st M.					
.. 2d M.	75	75	75	75	75
Northern Central	42	42	42	42	42
.. bonds, 1885					
.. 1900. 87	87	87	87	87	87
N. W. Va. 1st mort.					
.. 2d mort.					
.. 3d mort.					
City Passenger R. R.					

## Boston Stock Exchange.

Actual Sale Prices for the week ending Nov. 2.

Th.27.F.28.Sat.29.M.31.Tu.1. W.2

Boston and Albany	149	149	150	150	150
Boston and Lowell					
Boston and Maine					
Boston and Providence					
Boston, Hartford & Erie	4	34	34	34	34
.. 7s, new.					
Cheshire, pref.					
Concord					
Connecticut River					
Eastern	122	122	123	123	123
Fitchburg					
Manchester & Lawrence					
Michigan Central					
Northern, N. H.	112	112	112	112	112
Ogdens & Lake Cham.	89	89	89	89	89
.. pref.					
Old Colony & Newport	97	98	97	97	97
Ph. Wil. & Baltimore	55	55	56	56	56
Portl'd, Saco & Porta.	113	113	113	113	113
Union Pacific	24	23	24	23	23
.. 6s.	81	81	80	80	80
.. Land Grant	78	78	72	72	72
.. Income 10s.	71	70	70	71	71
Vermont & Canada	106	105	106	106	106
Vermont & Mass.					
South Boston (Horse)					
Cambridge					
Metropolitan					
Middlesex					
Central Mining Co.					
Copper Falls					
Franklin					
Huron					
Isle Royale					
National					
Pewabic					
Pittsburg					
Quincy					

week was \$2,072,535, reflecting the diminished importations; and the specie export was only \$303,562. The outflow of coin from the Treasury Office, through the sale of a million of Government gold on Wednesday, the 26th ult., and the week's disbursements of \$8,872,886 of coin-interest, on the November account, without rebate, and \$49,000 in further redemptions of the 1871 bonds, has been \$4,921,386. The Treasury Debt exhibit for Nov. 1, makes the coin balances in control of the Department \$103,181,073, including \$18,666,500, represented by outstanding coin-certificates. The reduction of the public indebtedness, during October, was \$5,129,297, and since March 1, 1870, \$96,544,122.

The specie reserve of the city banks according to the latest return is \$13,108,406, against \$21,928,046 same time last year. The city bank deposits are now \$193,077,808, against \$180,828,832 week ending Oct. 30 1869. The legal tender reserve amounts to \$58,009,099, against \$53,177,883 same time last year. The circulation now stands at \$82,420,509, against \$84,136,249 same time last year. The loans are now \$265,979,485, against \$250,948,883 at this date last year. The Bank Exchanges at the Clearing House through the past week, averaged \$88,238,140 a day, against a daily average of \$87,257,885 the preceding week. The current weeks' exchanges average about 88 1/2 millions a day. The city banks, last week, reported a gain of \$1,160,298 of specie, \$8,498,825 of deposits, and \$618,287 of legal tender notes. They increased their loans \$314,089; and reduced their circulation, \$96,557.

The coin reserves of the Treasury Department on Monday were \$103,181,073, including about 13 1/2 millions on deposit on private account; currency balances, \$26,815,384.

National Bank notes to the amount of \$641,170 were issued last week by the Treasury Department, making the total issue to 1,692 banks thus far, amount to \$335,182,438, against \$282,555,440 at the close of the fiscal year ending June 30, 1866. From the total issue is to be deducted the currency returned, including worn out notes, amounting to \$33,298,079 leaving, with the existing 1,612 banks, (having an aggregate capital of \$427,235,701,) an actual circulation at this date, of \$301,889,359. The United States bonds held by Treasurer Spinner in trust for National Banks as security for circulating notes amount to \$344,596,550; and for the public deposits, \$16,481,050—making a total of \$361,078,600. The Treasury Department last week redeemed and destroyed \$333,516 of worn and mutilated fractional currency, and issued \$974,375 of new.

The U. S. Sub-Treasury receipts, week ending with Oct. 29, were \$6,022,434 in coin, (including \$2,070,000 from customs duties,) and \$4,497,301 in currency; payments, \$2,487,642 in coin, (including \$— of coin interest,) and \$5,247,416 in currency; balance at the close of the week, included \$65,171,734, of coin, against \$61,636,942 the preceding Saturday, and \$6,589,081 of currency, against \$7,339,196 at the close of the preceding week. The business of the Office on the first two days of the current week, was as follows. On Monday, receipts, \$540,422 in coin, (including \$502,000 from customs,) and \$416,988 in currency; payments \$56,283 of coin (including

## American Railroad Journal.

Saturday, November 5, 1870.

## Stock Exchange and Money Market.

The Money market has been fairly active, through the week. The offerings of capital have been comparatively liberal for the season, and the prevailing rates have been 5@6 per cent. on call, though exceptional transactions have been reported as low as 4, and as high as 7 per cent. There has been a very moderate supply of prime mercantile paper on the market, and a good inquiry has been noted for the higher grades at 7@8 1/2 per cent. per annum. The City banks, in their last weekly return, showed a gain of nearly three and a half millions in the deposit line, with an addition of over a million to the specie average, and of about five-eighths of a million to the reserve of legal tender notes. At the Treasury Office, the aggregate cash (coin and currency) balances, as officially reported, were about two and three fourth millions more than at the close of the preceding week, standing at \$71,760,815 on Saturday evening, against \$68,976,187 the previous Saturday. The customs revenue at this port for the

— of coin interest), and \$536,572, of currency. On Tuesday, receipts, \$428,102 in coin (including \$406,000 from customs), and \$807,274 in currency; payments, \$4,243,359 in coin (including \$4,186,299 of coin interest) and \$305,725 of currency. The balance at the close of business on Tuesday included \$6,971,041 of currency, and \$61,840,106 of coin, against a balance a week previous of \$7,194,823 currency, and \$63,071,130 coin.

The aggregate receipts of the U. S. Sub-Treasury in October were \$51,530,870, including \$11,724,402 from customs; aggregate payments, \$47,417,085, including \$2,112,636 of coin interest.

The U. S. Sub-Treasurer issued in October \$4,934,500 of coin certificates.

The U. S. Sub-Treasurer retired, last week, \$1,776,661 of coin certificates, received for customs.

Government revenues have been yielding less satisfactorily. The excises, during the week yielded about  $2\frac{3}{4}$  millions; customs at the port of New York, \$1,932,661, and at the outports about \$650,000 (in coin) more, making the grand total income for the week equal to about \$5,655,498 in currency. The income of the Government, from excises, since July 1, 1870, has been about 64 millions.

Gold has been in less confident speculative demand and has receded from  $112\frac{1}{2}$ @ $110\frac{1}{2}$ , under the more liberal offerings, largely of the November coin interest disbursements on account of the public debt. The customs and export call has been less active. Toward the close, the tendency was decidedly downward, and the final quotation on Wednesday was  $110\frac{1}{2}$ , against 112 the preceding Wednesday. Early on Monday, the Government financial programme for November was made public. It provided for sales, during the current month, of five millions of Gold, as follows: Wednesday, November 2, \$1,000,000; Wednesday, November 9, \$1,000,000; Wednesday, November 16, \$1,000,000; Wednesday, November 23, \$1,000,000; Wednesday, November 30, \$1,000,000. And purchases of four millions of Five Twenties, as follows: Thursday, November 3, \$1,000,000; Thursday, November 10, \$1,000,000; Thursday, November 17, \$1,000,000; Thursday, November 24, \$1,000,000. On Wednesday, Government marketed \$1,755,000 of gold at from 111.01 45@111.05. The bids reached an aggregate of \$5,025,000. This was the opening sale of the month, under the November programme. The aggregate of the November interest obligations on the public debt is \$23,851,629, of which the New York office has already paid off \$1,856,397 with and \$5,060,000 without rebate. There has been less stringency in the Gold Loan market, and rates have been more comfortable for borrowers.

The export drain last week was \$303,562 against \$556,180 week ending Oct. 22; \$654,323 week ending with Oct. 15; \$802,174 week ending with Oct. 8; and \$465,260 week ending with Oct. 1. The shipments thus far this year have been about  $51\frac{1}{2}$  millions, against  $28\frac{1}{2}$  millions same time in 1869;  $66\frac{1}{2}$  millions same time in 1868;  $43\frac{1}{2}$  millions same time in 1867; nearly  $54\frac{1}{2}$  millions same time in 1866; and  $25\frac{1}{2}$  millions same time in 1865. The exchanges at the Gold Exchange Bank, which were  $53\frac{1}{2}$  millions on Thursday of last week, were  $52\frac{1}{2}$  millions on Saturday,  $32\frac{1}{2}$

millions on Monday of this week, and nearly  $62\frac{1}{2}$  millions on Tuesday. On Wednesday they were  $46\frac{1}{2}$  millions.

The customs demand for Gold last week, averaged \$345,000 a day; thus far, this week, it has averaged \$454,000, a day, or equal to a weekly aggregate of \$2,624,000. The arrivals of specie from Europe, Havana and other foreign ports, during the week were \$183,668; and since Jan. 1, 1870, \$8,627,378, against \$14,711,836 same time in 1869. The total customs revenue of the Government, in coin, at this port, since Jan. 1, has been \$121,747,892 against \$113,442,993, same time in 1869.

The exports of specie, from this port, last week, were \$303,562 against \$684,658 same week last year; and since Jan. 1, 1870, \$51,546,811, against \$28,564,035 same time in 1869. Government disbursed last week through the U. S. Sub-Treasury here, on account of the coin interest on the public debt \$3,872,386; and since Jan. 1, 1870, \$72,013,267 against \$76,989,086 same time in 1869.

The customs revenue at the port of San Francisco, from Jan. 1 to Oct. 20th, was \$6,587,383, against \$6,863,709 same time last year. The specie exports by steamer and railway, from San Francisco, from Jan. 1, 1870 to Oct. 20th, were \$28,317,627, against \$32,648,012 same time last year.

The foreign exchange market has been quoted firmer, with quite moderate offerings of bills reported. The demand, however, has been on a restricted scale, and has been mainly for remittances on account of the November 5-20 coupons, received from foreign owners. Bankers' sixty day bills on London closed on Wednesday at  $109\frac{1}{2}$ @ $109\frac{3}{8}$ ; sight bills on London,  $109\frac{3}{4}$ @110. The offerings of produce bills have been rather freer. The week's exports of domestic produce have been to the currency value of \$8,856,163, and since January 1, 1870, \$152,948,422 against \$164,255,751, same time in 1869.

The dealings in the Public Funds have been comparatively limited, in the open market, since our last; and influenced, in part, by the fall in Gold, prices have yielded a fraction, closing dull, but about steady at the modified rates for all issues, save the Ten-Forties, which attracted considerable attention, in view of the decision of the Secretary of the Treasury to allow issues of currency to the extent of 90 per cent. of the face value of those bonds, or equal to that allowed upon the six per cent. bonds. This arrangement will probably lead to an extensive substitution by the banks of Ten-forties in place of the Six per cents, now deposited as the basis of circulation.

Government closed the October bond purchases by buying in two millions of Five-twenties on Thursday of last week, out of an aggregate offering of about  $8\frac{1}{4}$  millions, at equal to about the open market rates. It commenced its November purchases on Thursday of the current week.

U. S. sixes of 1881 closed here on Wednesday of the current week at  $118\frac{1}{2}$ @ $118\frac{3}{4}$ ; U. S. Five-Twenties of 1862, ex-coupon 109@ $109\frac{1}{2}$ ; U. S. Five-twenties of 1864 ex-coupon 107@ $108\frac{1}{2}$ ; U. S. Five-Twenties of 1865 ex-coupon at 108@ $108\frac{1}{2}$ ; U. S. Five-twenties of 1865 consolidated,  $110\frac{1}{2}$ @ $110\frac{1}{4}$ ; U. S. Five-Twenties of 1867,  $110\frac{1}{2}$ @ $110\frac{1}{4}$ ; U. S. Five-twenties of 1868,  $110\frac{1}{2}$ @

$110\frac{1}{2}$ ; U. S. Ten-forties at  $106\frac{1}{2}$ @ $107$ ; U. S. Six per cent. currency bonds,  $111$ @ $111\frac{1}{4}$ .

State bonds have been in limited demand, through the week, but have been quoted about steady.

Railway bonds have been in fair investment request, at well supported prices. Central Pacific Sixes have been quite active, closing buoyantly on Wednesday at  $91$ @ $91\frac{1}{2}$ . The Union Pacific Sixes closed on Wednesday at  $82\frac{1}{2}$ @ $83$ . The registered First Mortgage bonds of the Chesapeake and Ohio Railroad have been in moderate demand for investment purposes at 90 per cent. and accrued interest.

Railway and miscellaneous share property has been moderately active but quite variable in price, closing dull and irregular.

The latest quotations at the London Stock Exchange compare as follows with former returns:

	Oct. 19.	Oct. 26.	Nov. 2.
Consols .....	92 $\frac{5}{8}$	92 $\frac{1}{2}$	92 $\frac{3}{4}$
U. S. 5-20's of 1862 .....	*89 $\frac{1}{2}$	89 $\frac{1}{2}$	89 $\frac{1}{4}$
U. S. 5-20s. 1865 .....	*88 $\frac{3}{4}$	88 $\frac{1}{2}$	88 $\frac{1}{2}$
" 1867 .....	89 $\frac{1}{2}$	90	—
" 10-40s .....	87	87 $\frac{1}{4}$	87
Erie .....	18 $\frac{3}{4}$	18 $\frac{3}{4}$	18 $\frac{1}{4}$
Ill. Central .....	114	114	110 $\frac{1}{2}$
At. and Gt. West .....	30	29 $\frac{1}{2}$	28 $\frac{1}{2}$

\* Ex-Coupon.

At Frankfort on Wednesday, U. S. Five Twenties were quoted at  $95\frac{5}{8}$ .

There has been less animation in the line of foreign goods without any marked changes in values. The dry goods entries at this port, last week, were \$1,913,931, making with the general merchandise imports, a total of \$5,272,080 against \$6,310,229 the preceding week.

Ocean freights have been fairly active and quoted firmer. For Liverpool we quote flour at 2s. 6d. by sail, and 3s. by steamer per bbl.; grain at 9@ $9\frac{1}{4}$ d. by sail, and 10@ $10\frac{1}{4}$ d. by steamer per bushel; cotton at  $1\frac{1}{4}$ @ $1\frac{5}{8}$ d. by sail and  $1\frac{1}{2}$ d. @ $1\frac{5}{8}$ d. by steamer per lb.; and heavy goods 20s. @30s. by sail, and 30s. @45s. by steamer, per ton. Total number of vessels in port on Wednesday, 457.

The following will show the exports (exclusive of specie) from New York to foreign ports for the week ending November 1st, and since the beginning of the year:

	1869.	1870.
For the week .....	\$4,132,157	\$8,856,163
Previously reported ..	160,128,594	149,092,259

Since Jan. 1 .....

\$164,255,751 \$152,948,422

The imports for the week ending Oct. 29, and since the beginning of the year, have been as follows:

	1869.	1870.
Dry goods .....	\$1,630,309	\$1,913,931
Gen. merchandise .....	2,422,111	3,358,149

Total for the week .....

\$4,052,420 \$5,272,080

Previously reported .....

248,480,380 249,689,700

Since January 1 .....

\$252,532,800 \$254,961,780

The following quotations of sales of Railway and other securities are in addition to those given elsewhere in our columns:—

New York.—Arkansas 7s issued to Little Rock and Fort Smith R. R., 66; South Carolina 6s, new Jan. and July, 67; N. Y. State 7s, Bounty loan reg., 107 $\frac{1}{2}$ ; Ohio 6s, 1881, 108; Pacific R. R. 7s, 110 $\frac{1}{2}$ @110 $\frac{1}{4}$ ; Ohio and Miss. consol. bonds, guar. by Mo., 96; Ohio and Miss. consol. bonds,

87 $\frac{1}{2}$ ; Toledo, Peoria and Warsaw W. D., 80; do, 2d mort., 68; New York and New Haven R. R., 155; do, scrip, 143 $\frac{1}{2}$ ; do, 6s, 97; Peninsula R. R. 7s, 90; Jefferson R. R. 1st mort., 90 $\frac{1}{4}$ ; Morris and Essex const. bonds, 89; Cleveland, Painesville and Ashtabula 7s, new, 91 $\frac{1}{4}$ ; Great Western 1st mort., 1888, 89; Joliet and Chicago 8s, 106; North Missouri 1st mort., 86 $\frac{1}{4}$ ; St. Louis, Jacksonville and Chicago 1st mort., 92; Albany and Susq. 2d mort., 98; Norwich and Worcester R. R., 104; Western Union Telegraph, 39 $\frac{3}{4}$ ; Am. Mer. Union Exp., 44; Adams Express, 67 $\frac{1}{2}$ ; Wells Fargo Exp., 37; U. S. Exp., 35; Brooklyn 6s, W. L., 93 $\frac{1}{2}$ ; American Coal, 36; Central gold, 0.15; Grass Valley gold, 0.26; Smith and Parmalee gold, 0.69.

**Philadelphia.**—West Jersey 7s, 95 $\frac{1}{4}$ ; Lehigh Nav. conv. loan, 78 $\frac{1}{2}$ ; Wilmington and Reading 7s, 90 $\frac{1}{4}$ ; Philadelphia and Reading 6s, 1848-80, 97 $\frac{1}{2}$ ; Pennsylvania and New York Canal 7s, 91 $\frac{1}{2}$ ; Scranton and Erie 7s, 101 $\frac{1}{2}$ ; Harrisburg and Lancaster 6s, 95; Connecting R. R. bonds, 88; Oil Creek and Allegheny River R. R., 45; do, 7s, 81; Delaware Division Canal, 45; Tioga, 50; Philadelphia City 6s, prior to 1862, 103; Shamokin Coal, 4 $\frac{1}{2}$ ; Big Mt. Coal, 5 $\frac{1}{2}$ ; Fulton Coal, 4 $\frac{1}{2}$ . The latest quotations are: City 6s, 101 $\frac{1}{2}$ @102 $\frac{1}{4}$ ; do, free of tax, 102 $\frac{1}{4}$ @102 $\frac{1}{2}$ ; State 6s, coupon, 103@104; do, 6s, W. L., 104 $\frac{1}{4}$ @105; do, 1st series, 104@105 $\frac{1}{2}$ ; do, 2d series, 105 $\frac{1}{4}$ @106 $\frac{1}{2}$ ; do, 3d series, 109@110; Reading, 50 $\frac{1}{4}$  750 $\frac{1}{4}$ ; do, 7s, 1898, 102 $\frac{1}{2}$ @103 $\frac{1}{2}$ ; do, mort. 6s, 1880, 97@97 $\frac{1}{2}$ ; Camden and Amboy, 115 $\frac{1}{2}$ @115 $\frac{1}{2}$ ; do, mort. 6s, 1889, 94@94 $\frac{1}{2}$ ; do, 1883, 92@93; do, 1889, 92@93; Penn. R. R., 58@58 $\frac{1}{2}$ ; do, 1st mort., 105@—; do, 2d mort., 100 $\frac{1}{2}$ @101 $\frac{1}{2}$ ; Little Schuylkill R. R., 42 $\frac{1}{2}$ @42 $\frac{1}{2}$ ; Morris Canal, 25@30; do, pref., 65@70; do, 6s, 80@84; do, scrip 7s, 65@—; Susquehanna Canal, 5 $\frac{1}{2}$ @6 $\frac{1}{2}$ ; do, 6s, 45@47; Schuylkill Nav., 7@8; do, pref., 16@16 $\frac{1}{2}$ ; do, 6s, 1882, 73 $\frac{1}{4}$ @74; Elmira and Williamsport pref., 39@40; do, 7s, 1873, 92@92 $\frac{1}{2}$ ; do, 5s, 58@60; Lehigh Coal and Navigation, 32 $\frac{1}{2}$ @32 $\frac{1}{2}$ ; do, 6s, 1884, 83@83 $\frac{1}{2}$ ; do, R. R. Loan, 87@88; do, Gold Loan, 89@89 $\frac{1}{2}$ ; North Pennsylvania, 42 $\frac{1}{2}$ @43; do, 6s, 98@100; do, 7s, 89 $\frac{1}{2}$ @90 $\frac{1}{2}$ ; do, Chatte 10s, 111@—; Philadelphia and Erie, 26 $\frac{1}{4}$ @26 $\frac{1}{2}$ ; do, 6s, 91@—; Minehill, 51 $\frac{1}{2}$ @52; Catawissa, 12@15; do, pref., 38 $\frac{1}{2}$ @38 $\frac{3}{4}$ ; Lehigh Valley, 57 $\frac{1}{2}$ @58; do, 6s, 100 $\frac{1}{2}$ @—; do, 6s, reg., 99@99 $\frac{1}{2}$ ; Fifth and Sixth streets, (horse), 37@40; Second and Third, 51@52; Thirteenth and Fifteenth, 22@23; Spruce and Pine, 24@25; Green and Coates, 38@40; Chestnut and Walnut, 44@45; Hestonville, 14 $\frac{1}{2}$ @15; Union, 48@—.

**Boston.**—Old Colony and Newport 6s, 96; Phila., Wil. and Balt. 6s, 1887, 94 $\frac{1}{4}$ ; Cedar Rapids and Missouri 7s, 1916, 88 $\frac{1}{4}$ ; Cincinnati, Sandusky and Cleveland R. R., 17 $\frac{1}{4}$ ; do, 7s, 1890, 78 $\frac{1}{2}$ ; Eastern R. R. 6s, 1874, 99; Vermont Central 1st mort., 85; Vermont Central and Vermont and Canada 8s, 102 $\frac{3}{4}$ ; Mansfield and Framingham R. R. 7s, 93 $\frac{1}{2}$ ; Dixon, Peoria and Hannibal R. R. 8s, 1889, 97; Indianapolis, Bloomington and Western 7s, 82 $\frac{1}{2}$ ; Vermont and Massachusetts 6s, 1888, 92 $\frac{1}{4}$ ; Burlington and Missouri River R. R., 8s, 1889, 102 $\frac{1}{2}$ ; Norwich and Worcester R. R., 103 $\frac{1}{2}$ ; Eastern (N. H.) R. R., 117 $\frac{1}{4}$ ; Indianapolis and Cincinnati R. R., 7; Conn. and Pass. Rivers pref., 84; Summit Branch, 86 $\frac{1}{4}$ ; Boston Water Power Co., 16; Cary Imp., 8; Massachusetts 5s,

1894, gold, 96 $\frac{1}{4}$ ; do, 6s, 1872, gold, 106 $\frac{1}{4}$ ; New Hampshire 6s, 1884, 95 $\frac{1}{2}$ ; Maine 6s, 1889, 97 $\frac{1}{2}$ ; Boston 6s, 1880, currency, 100 $\frac{1}{2}$ ; do, 5s, 1877, gold, 95 $\frac{1}{2}$ ; Worcester 6s, 1880@1885, 99 $\frac{1}{4}$ ; Albany 6s, 1896, 92; Bangor 6s, 1874, 95; Portland 6s, 1877, 95 $\frac{1}{4}$ ; do, 1887, 90 $\frac{1}{4}$ ; St. Louis 6s, 1888, 85 $\frac{1}{4}$ ; Hartford 6s, 1889, 96 $\frac{1}{4}$ ; Brooklyn 7s, 1904, 100 $\frac{1}{2}$ ; do, 6s, 1892, 92 $\frac{1}{4}$ ; Chicago 7s, 98; St. Louis Co. 7s, 1885, 95; Cincinnati 6s, 1886, 92; Cook Co., Ills., 7s, 1880, 97 $\frac{1}{4}$ ; Hancock Mining Co., 13 $\frac{1}{2}$ .

**Baltimore.**—Orange and Alexandria 3d mort. 8s, 82; do, 4th mort., 78 $\frac{1}{2}$ ; Western Maryland 2d pref. bonds, 62; Northern Central 6s, 1900, gold, 94; Maryland Defense bonds, 108; Virginia 6s, old, reg., 50 $\frac{1}{2}$ ; Bare Hill Mining Co., 0.09. The latest quotations are: Pittsburg and Connellsville 7s, 1898, 91 $\frac{1}{4}$ @92 $\frac{1}{2}$ ; Baltimore and Ohio, 126@127; do, 6s, 1875, 94@95; do, 1880, 93 $\frac{1}{2}$ @94 $\frac{1}{2}$ ; do, 1885, 91 $\frac{1}{4}$ @92; Northern Central, 42@43 $\frac{1}{2}$ ; do, 6s, 1885, 93@94; do, 1900, 87@87 $\frac{1}{4}$ ; do, 6s, 1900, gold, 92@93 $\frac{1}{2}$ ; Parkersburg Branch, —@—; N. W. Va. 1st mort., 94@95; do, 2d mort., 95@—; do, 3d mort., 1885, —@91; Marietta and Cincinnati 7s, 1892, 92@93; do, 2d mort., 71 $\frac{1}{2}$ @72 $\frac{1}{2}$ ; Central Ohio, 25@25; do, 1st mort., 83@—; Western Md. 6s, 1890, 75@77; do, guar., by Baltimore City, 90@92 $\frac{1}{2}$ ; do, 2d mort., guar., 88@—; do, 6s, pref., 61 $\frac{1}{2}$ @63 $\frac{1}{2}$ ; do, 6s, guar., by Washington Co., 80@85; Richmond and Danville bonds, 75@77; Orange and Alexandria 1st mort., 6s, 82@82; do, 2d mort., 6s, 74 $\frac{1}{2}$ @75; do, 3d mort., 8s, 81@82 $\frac{1}{2}$ ; do, 4th mort., 8s, 73 $\frac{1}{4}$ @73 $\frac{1}{2}$ ; Orange, Alex. and Manassas 7s, 75@76; Virginia and Tennessee 8s, 83@83 $\frac{1}{2}$ ; do, 6s, 1st mort., 81@84; do, 6s, 2d mort., 73@75; Baltimore 6s, 1875, 91 $\frac{1}{4}$ @91 $\frac{1}{2}$ ; do, 1884, 90 $\frac{1}{2}$ @91; do, 1886, 91 $\frac{1}{4}$ @92; do, 1890, 92@92 $\frac{1}{2}$ ; do, 1898, 93@94; do, 1900, 91 $\frac{1}{4}$ @91 $\frac{1}{2}$ ; do, 6s, 1888-70, 75@79; Memphis City 6s, 56@58; Maryland Defense Loan, 1883, 102 $\frac{3}{4}$ @103; City Passenger R. R., 19@21; George's Creek Coal, 60@62; Atlantic Coal, 1.50@3.00; Bare Hill, 0.09@1.00.

**THE CENTRAL RAILROAD OF IOWA**, connecting St. Louis and St. Paul, and running through the finest portion of Iowa, is now nearly completed. The remaining million of its 7 per cent. gold First Mortgage Bonds is now offered at 90 and accrued interest. Parties who desire a strictly first-class investment in one of the very best roads in the county are invited to examine into the merits of this security. It pays fully one-third more interest than governments, which are taken in exchange at the highest market rate.

W. B. SHATTUCK, Treasurer,  
32 Pine-st., New York.

After a full examination, we have accepted an Agency for the sale of the above First Mortgage Bonds, and desire to recommend them to our customers AS A THOROUGHLY SAFE AS WELL AS PROFITABLE INVESTMENT. JAY COOKE & CO.

Pamphlets, with map, may be obtained, and subscriptions will be received at the COMPANY'S OFFICES, No. 32 Pine-st., New York; at offices of JAY COOKE & CO., New York, Philadelphia and Washington; the BANK OF NORTH AMERICA, and banking houses of HOWES & MACY, New York.

**The Seaboard and Roanoke Railroad Company** has declared a semi-annual dividend of 4 per cent., clear of United States tax.

## BANKING AND FINANCIAL.

HARVEY FISK.

A. S. HATCH.

OFFICE OF FISK & HATCH,  
BANKERS AND DEALERS IN GOVERNMENT  
SECURITIES, NO. 5 NASSAU ST.,  
NEW YORK, NOV. 1, 1870.

**THE FUNDING OF UNITED STATES FIVE-TWENTIES** into a first-class security, paying the same rate of interest (six per cent., gold), and which cannot be called in under twenty-five years without the consent of the holder, may now be effected at a clear profit of about twenty per cent., by exchanging them for the FIRST MORTGAGE BONDS OF THE CENTRAL PACIFIC RAILROAD COMPANY.

The five-twenties of 1867 are selling to-day at 110, and the Central Pacific Bonds at 91; \$1,000 of the former will buy \$1,000 of the latter, and leave nearly \$200 for use or for re-investment; or \$5,000 of the former, paying \$300 in gold annually, will buy \$6,000 of the latter, paying \$360 in gold annually, and leave a balance in cash of about \$50.

The Central Pacific is a completed, thoroughly-built, well-managed road, doing a large business, and earning an immense revenue. The bonds are well and favorably known, and constantly dealt in, both here and in the chief financial centres of Europe, and they can be disposed of at a quoted market price with the same facility as Government bonds, and are daily quoted at the Stock Exchange.

Having originally negotiated these bonds, and being thoroughly acquainted with their soundness and value, we have introduced them as a specialty in our regular business in connection with our dealings in Government securities, and recommend them without hesitation to our friends and customers desiring to make investments or to fund their five-twenties upon advantageous terms, without reduction of interest.

FISK & HATCH.

**CONNECTICUT LOAN.**—FIRST MORTGAGE SEVEN PER CENT. BONDS ON THE GRAND THROUGH ROUTE from NEW YORK TO BOSTON—issued by the NEW HAVEN, MIDDLETON AND WILLIMANTIC R. R. CO. OF CONNECTICUT.

The work on the Road has progressed steadily during the Summer and Fall. More than three-quarters of the line is finished; trains are running regularly between New Haven and Middletown, and it is believed the whole will be open for through business during the coming Spring.

The earnings on the section now in operation prove the capacity of the Road to pay largely over and above its interest liability.

THE NECESSARY FUNDS TO COMPLETE THE UNFINISHED WORK ARE SECURED, WHICH INSURES THE EARLY OPENING OF THE LINE, AND MAKES THE INVESTMENT AS DESIRABLE AS ON A ROAD ALREADY IN OPERATION.

PRICE PAR AND INTEREST.

Bonds can be obtained of any Bank or Banker, or by sending to ourselves.

HATCH & FOOTE,  
Bankers and Dealers in Government Securities,  
No. 12 WALL ST.

**The last rail**, completing the Mobile and Chattanooga Railroad between Mobile and New Orleans, was laid on the 29th ult.

**Grand Rapids and Indiana Railroad.**

The practical, formal opening of a railroad by which more than two hundred miles of direct communication are added to the trade of our city, is an event of more than passing interest.

We have already, through our correspondence, called the attention of our citizens to this work; now, through the sagacity and courtesy of its managers an excursion throws it open to their inspection.

This great work of internal improvement is designed ultimately to form a prominent link in the chain of intercommunication with China and the East Indies generally through the short route of the Northern Pacific Railroad.

Its immediate and to us more important mission is to open to our markets the rich agricultural products of the garden state of the West, its vast fields of pine and other lumber, its stores of plaster, and even the immense resources of iron and copper will be rendered more valuable and available for our purposes.

Like similar projects undertaken some twenty years ago, the line now known as the Grand Rapids and Indiana Railroad, consisted of some three or more corporations, which were merged in 1857. The auspices were considered favorable and under prudent and sagacious management the road might have been placed upon sound financial basis and completed years ago. It issued bonds based upon its land grant; it received liberal donations from villages and other municipal corporations, and citizens subscribed to its stock. Its finances were not busbanded nor judiciously expended, and its bonds, getting into the hands of financiers whose reputation would not admit of their getting further, the company fell into discredit.

Thus it dragged until it came into the hands of Judge Hanna, of Fort Wayne, in 1866, who was elected President in that year. Those who know the reputation and practical ability of this lamented official do not doubt that the measure he planned would have eventuated successfully. His untimely demise, however, destroyed all hopes in that quarter,—the Hon. J. K. Edgerton, of Fort Wayne, became the Judge's successor as President.

Mr. Edgerton brought with him an extended reputation in railroad operations, and a character for honor and integrity unimpeachable and unimpeached. He obtained the assistance of Messrs. Talcott & Co., of Chicago, as contractors, gentlemen of wealth and character, well known in railroad circles. For two long and dreary years the President of the road and the contractors prosecuted the work under the greatest financial embarrassment and discouragement. Promises of aid and assistance, upon which they relied, only met with disappointment, and a most powerful and well planned scheme was laid to defeat the completion of the road, and secure for its projectors the land grant and franchises of the Grand Rapids and Indiana Railroad. Nearly one hundred miles of railroad, parallel to its line, were constructed and legislation obtained, providing for the contingency of the transfer to this adverse interest. Talcott & Co. completed twenty miles of the railroad, from Grand Rapids north, to Cedar Springs in 1867, and although most of the grading, ties, &c., for fifty miles south from Grand Rapids were prepared, the road was brought nearly to a stand still in 1868. The hearts of the schemers rejoiced, but at this junction came the Continental Improvement Company.

This Company, organized in Pennsylvania, with General G. W. Cass for its President, began its operations on the 1st day of May, 1869. In sixty days it had cleared forests, levelled hills, filled morasses, bridged rivers, and constructed complete and equipped, twenty miles of first-class railroad. A work unprecedented even in these days of Pacific energy and engineering. The road was constructed under a receiver, the Hon. Jesse L. Williams, of Fort Wayne (it had found its way into court), by contractors Messrs. Talcott & Co., of Chicago; Mr. Jas. Zimmerman, a Pennsyl-

vian from Lancaster county, was also one of the contracting party, and Mr. Williams called upon Mr. Godfrey, of Grand Rapids, to assist in a part of the work. The friends of the company were agreeably surprised, and the enemies astounded and confounded. At this stage of proceedings, the parties who had undertaken to gobble the whole of the land grant saw their chances growing small by degrees, with imperceptible cheek, proposed to "withdraw their opposition, provided the Continental Improvement would divide the land grant with them! As the late Col. Diehl would say, "there has been no *divy* as yet."

The Company then began to look around and examine their property, of which they had little knowledge through their own agents. Ties and timber, delivered many years before, had rotted on the ground. Other, more recently obtained, had been taken by dishonest individuals, they had been used to repair highways, and one lot of seven thousand cross ties carried off bodily to another railroad and sold to another company. There were many unliquidated accounts and many more were claimed. Deeds for right of way had never been recorded and many had been lost or destroyed, and all sorts of claims, legitimate and illegitimate, were made by property owners and interested parties. Our townsmen, Mr. D. H. Williams was engaged in securing the timber and property of the company between Fort Wayne and Grand Rapids, and the President of the Railroad Company, assisted by Mr. Williams and others, unravelled and adjusted the almost inextricable confusion into which the right of way question had become involved. In the meanwhile the Continental Company organized the Land Department under the supervision of the Hon. William A. Howard of Detroit, as Commissioner, assisted by the Hon. P. R. L. Pierce, of Grand Rapids. They also placed the company upon a sound financial basis, issuing bonds guaranteed by the Pittsburg, Fort Wayne and Chicago Railway, and for the payment of which they mortgaged their property and pledged the proceeds of the sale of their lands. These securities have already taken rank amongst the first-class securities of the country, and have been taken by moneyed men for investment, and have never been seen in the market in this country. Work was resumed upon the railroad north of Fort Wayne, and early in June, 1870, the road was completed and cars running to Sturgis, fifty-six miles north of Fort Wayne. At about the same date a further section of twenty miles north of Grand Rapids was opened through Big Rapids on the Muskegon river to the City of Paris, which is the present terminus of the road at the north. The excursionists will pass over more than two hundred miles of railroad, all but twenty of which were mainly constructed and entirely completed by a company organized in Pennsylvania, much of the capital being owned here and the officers and the board of directors, with a single exception, Col. Thomas A. Scott, being residents of this city. The officers of the Continental Improvement Company are G. W. Cass, President; Wm. Thaw, Vice President; and W. R. Shelby, Secretary and Treasurer.

By a contract with the Pittsburg, Fort Wayne and Chicago Railroad Co., assumed by the consent of all parties by the Pennsylvania Railroad Co., that company controls the stock of the Grand Rapids and Indiana Railroad Company, and its management is under the control of J. N. McCullough, Esq., as General Manager, who is also General Manager of the Pittsburg, Fort Wayne and Chicago Railway, (Pennsylvania Railroad lessee.)

The officers are J. N. McCullough, Esq., General Manager; Charles E. Gorham, Fort Wayne, General Superintendent; William P. Shinn, Pittsburg, General Freight Agent; F. L. Myres, Chicago, General Passenger Agent. These all hold corresponding situations on the Pittsburg, Fort Wayne and Chicago Railway. They are assisted by H. D. Wallen, of Fort Wayne, and J. L. Shaw, of Grand Rapids, Assistant Superintendents, and

E. P. Vining, of Grand Rapids, Freight Agent, and F. Gorham, of Fort Wayne, Auditor.

Thus Pennsylvania capital and Pittsburg energy has permeated this, hitherto to us, inaccessible region, and restored order out of chaos, and a well organized and equipped railroad now reaches two hundred miles into a country with which we have not had much intercourse. More than half a million of dollars has already been paid to Pittsburg mechanics to build and equip this road. Directly and indirectly, this improvement has been the means of the disbursement of a million of dollars in this vicinity, and yet we could probably count upon our fingers all who have ever heard that there was such a railroad in existence.

As we remarked before, this railroad is designed to connect Fort Wayne in Indiana with the Straits of Mackinac in Michigan. It is literally a back bone passing through the left centre of the latter State for a distance of one hundred miles through one of the proverbially fertile regions of the country, if not of the world.

A correspondent of this paper during the year 1869, wrote as follows of this region :

**A BEAUTIFUL COUNTRY.**

"Three miles to the north, Fawn river is crossed, and one mile beyond this is the boundary line between the States of Indiana and Michigan. We leave the Mongquanong Prairie and enter upon the prairies of Michigan, the first of which is Oxbow Prairie, outlying the one in which is located the village of Sturgis. Unlike the general prairie region of the Western States, the prairies of Michigan are underlaid with a gravelly soil, and are almost unaffected by excessive rains or protracted drouth. Notwithstanding the heavy rains which have proven so disastrous the past season to the corn crop of the West generally, owing to the facts above stated, the crop of that cereal upon the prairies of Michigan and of Northern Indiana will be a good average. Winter wheat and fruit, so precarious on the Western prairies, are here sure and profitable. The rich fields of golden wheat, and the trees bending with their loads of luscious fruit, which meet one's gaze in this region, fill the unaccustomed eye with wonder at the profusion with which these gifts of a bountiful Creator have been bestowed upon this favored locality. A generation has not passed since this soil was reclaimed from the savage; yet beautiful villages, highly improved farms, excellent schools, well filled colleges of high rank, long lines of deposit in country banks, show that this community is intelligent, industrious and prosperous; and a contemporary says, speaking of the Nottawa Prairie: 'Michigan abounds, as is well known, with prairies limited in extent as compared with those vast tracts in Illinois and other western States, but equally rich in soil and susceptible of raising winter wheat, fruit and other crops, which fail farther west. Amongst the richest in soil and most picturesque in appearance, is Nottawa Prairie, in St. Joseph county. On the north it is bounded by the St. Joseph river, the luxuriant foliage of the forest trees upon the banks forming a relief to the otherwise somewhat monotonous landscape of the prairie.'"

The City of Fort Wayne, the southern terminus of the road, is located on Wabash and Erie Canal, at the crossing of the Pittsburg, Fort Wayne and Chicago Railway, the Toledo, Wabash and Western, the Cincinnati and Munice, and the Jackson, Lansing and Saginaw Railroads. It contains thirty thousand inhabitants, and is already a place of commercial and manufacturing importance. It will be a very favorable point for the distribution of the immense lumber, plaster and other traffic of the Grand Rapids and Indiana Railroad.

Kendallville is twenty-six miles from Fort Wayne, on the Michigan Southern "Air Line railroad," and is the leading business point in Noble county, Indiana. It contains about five thousand inhabitants, and is one of the most important shipping points between Toledo and Chicago.

Rome City is situated seven miles northwest

from Kendallville, at the outlet of an extensive system of lakes, which cover many miles of ground, and which form a reservoir for a water power which has at this point a fall of twenty-six feet; it is already improved with woolen factories, flouring mills, &c., which, when fully developed, will make this an important point. The village is located on a fine elevated plateau, with a gravelly soil, and there are chalybeate springs, which are said to possess great medicinal virtues. The beautiful lakes, affording many miles for the sports of sailing or rowing, and fishing; delightfully shaded banks, admirably adapted for walks and picturesque drives, seem to justify anticipations which steps have already been taken to realize, to wit: To erect buildings and make it a summer resort for persons seeking health and recreation.

La Grange is the county seat of the rich and fertile county of the same name. This is a very pleasant and prosperous village, situated upon the verge of the beautiful and productive prairie region developed upon the north and west.

Northward six miles brings us to the beautiful village of Lima, situated in the midst of the Mongoguanong Prairie, on the Pigeon river.

Sturgis is fifty-six miles north from Fort Wayne, located upon Sturgis prairie. The Grand Rapids and Indiana railroad crosses the Michigan Southern railroad at this place.

Seven miles north from Sturgis is the picturesque village of Nottawa, delightfully situated on the banks of Sand Lake. Two miles further northward the "Michigan Air Line" Railroad is crossed, a road designed to shorten the distance between Detroit and Chicago upon the Michigan Central Railroad, by cutting off a detour made by the latter to the northward, to reach the villages of Marshall, Battle Creek, Kalamazoo, etc.

Kalamazoo is one of the most beautiful villages in the State, or for that matter, in the country, or anywhere else. There are many blocks of stores, &c., and some very beautiful private residences. The building material chiefly used are the cream-colored, or so called "Milwaukee" brick. It has gas works and Holley water works, and its principal streets are paved with Nicholson pavement. It is the county seat of Kalamazoo county, and the State Lunatic Asylum is located here. It is now an important railroad centre, no less than five roads meeting at this point—Michigan Central, Grand Rapids and Indiana, the Kalamazoo and the White Pigeon; the Kalamazoo and South Haven; the Kalamazoo, Allegan and Grand Rapids; besides these, running from Port Huron, Michigan, to Chicago, Illinois, crosses the Grand Rapids and Indiana, a few miles south of this place.

The Railroad Company design the erection of an engine house, and such other shops and buildings as may be required upon grounds in the south part of the village, donated by Hon. Charles E. Stuart and others.

The branch of the Michigan Southern Railroad is crossed again at Plainwell, eleven miles north from Kalamazoo.

Grand Rapids is the city second in wealth and population in the State of Michigan only to the City of Detroit. It is situated at the head of navigation of the Grand river, which furnishes at this point almost an unlimited amount of power, by means of the rapids or falls, extending along the river three miles. The beds of plaster near this city are almost inexhaustible and now yield about one hundred thousand tons per annum. At this place are located the offices of the Company. Hon. W. A. Howard, formerly member of Congress from Michigan, is Commissioner of the Land Office. The office of Mr. Shaw, Assistant Superintendent, is also located here.

Mr. McQuewan, the well known lumber merchant from this city, has established, in company with Messrs. Long, extensive mills at Grand Rapids.

The country, after leaving the Grand river, assumes the usual feature of a new region just beginning to be developed. The immense piles of lumber, the shingles and lath, exhibit the staple iron trade, all of which can be supplied on terms

upon which the country will rely for its immediate prosperity. Embryo villages mark the line of the road in great profusion, and the school houses, church spires and the sign-boards show evidences that literature and religion, commerce and manufactures are already established.

We enter now upon the munificent domain of the Company, the Land Grant of the Company, thirty miles in width on each side of the road, and comprising altogether more than one million two hundred thousand acres of pine timber lands and agricultural lands, estimated to be worth the round sum of twelve millions of dollars.

Big Rapids, on the Muskegon is looked upon as the city of the future in this region. Pennsylvania enterprise has established itself here; the leading and most enterprising citizen, Mr. John Brown, was formerly in the lumber business in this vicinity, and is well known to many of our citizens.

The Continental Improvement Company, believing that the interests of the railroad would be advanced by the speedy opening and cultivation of their unimproved lands, early in the summer of this year sent the Rev. Dr. Tustin, of St. Mark's (Episcopal) church in Grand Rapids, to Norway, for the purpose of inducing emigration to their lands. His mission has been successful. Sixty males have already arrived, to be employed on the railroad during the winter, and to enter upon their lands in the spring. The families of these immigrants will follow them in the spring, and a large colony will probably be established eventually, as several hundred are preparing to follow at suitable intervals. Liberal provision for their transportation and comfort have been made by the railroad companies, who assist those requiring assistance, to be repaid by labor.

TABLE OF DISTANCES FROM PITTSBURGH AND FORT WAYNE.

	Miles.
Pittsburgh to Fort Wayne .....	320
Fort Wayne to	
Huntertown .....	12
Avilla .....	21
Lisbon .....	26
Kendallville .....	28
Rome City .....	35
La Grange .....	46
Lima .....	52
(MICHIGAN.)	
Sturgis .....	57
Air Line Crossing .....	67
Mendon .....	72
Brady .....	80
Aust'n's Lake .....	85
Kalamazoo .....	93
Plainwell .....	104
Martin .....	110
Wayland .....	120
Grand Rapids .....	142
Rockford .....	155
Cedar Springs .....	162
Pierson .....	169
Howard City .....	175
Morley .....	182
Big Rapids .....	197
Paris .....	202

We cannot conclude this article without referring to some of the advantages that will accrue to persons residing along the line of this new road, by thus being brought into direct communication with Pittsburgh. Our city has long been recognized as the great manufacturing center of the country, and the completion of this new line of travel and transportation brings those distant localities to our very doors, and will enable them to reap many benefits of which they would have otherwise been deprived.

Our manufacturers are prepared to meet and supply all the many wants incident to the settlement of a new country, or the requirements for the development and progress of the many thriving cities and villages located along the road. Our iron manufactures include every imaginable article known to the iron trade, all of which can be supplied on terms

more desirable than can be offered in any other place. Our machinists, who are skilled and experienced in the construction of machinery of all kinds, are prepared to supply every demand for engines, saw and grist mills, portable mills, planing machines, and the thousands of other machines which may be required, and can furnish them of such quality of workmanship and at such prices as will defy competition. Our extensive window glass and glass ware manufacturers are also prepared to fill orders no matter how large, while the numerous other articles, impossible to specify which are manufactured here will all find ready sale in the new market thus opened. The residents of the agricultural districts will find all the celebrated inventions, to facilitate and lighten the labors of agriculturists, such as plows, mowers, reapers, horse rakes, sowers, drills, presses, cane mills, etc., manufactured here in great variety and in superior style.

No doubt all the more important articles manufactured here have long been in use throughout the length and breadth of the country traversed by this new road, but now the consumers will have the opportunity of purchasing direct from our manufacturers, and can have their purchases shipped direct without being subjected to the annoyances of dealing through second parties and the delays incident to roundabout means of transportation. Indeed the advantages which will be gained by those living along the line of the road by direct communication with this city cannot be overestimated, and we feel confident that this will become more and more appreciated every day.—*Pittsburg Chronicle, Oct. 25.*

#### Mobile and Montgomery Railroad.

Messrs. SOUTTER & Co., No. 58 William street offer for sale at 95 and accrued interest, in currency, the unmarketed balance of \$450,000 of the First Mortgage Eight per cent. gold bonds of the Mobile and Montgomery Railroad Company. The purpose of the loan is to complete the connecting link of the road between Tensas, the present terminus, and the City of Mobile,—fifteen miles,—and thus to establish through rail connection to Mobile and New Orleans. The road, when extended to Mobile, will be 182 miles in length. The cost of the road is given at over \$30,000 a mile, while the mortgage is very little more than \$18,000 per mile. The road is the only connecting line of railway between Montgomery and Mobile, and is an important link in the great through coast line between New Orleans, Mobile, Montgomery, Savannah, Charleston, Richmond and New York, or the interior line between the same points, via Augusta, Charlotte and Danville. The net earnings of the road are reported as having regularly increased at the rate of about 20 per cent. per annum since the organization in 1867, and are now much more than enough to pay the interest upon all the bonds authorized to be issued, more than one-half of which are in the hands of the company. The State of Alabama gives its indorsement to the bonds of the Company, which are made payable, principal and interest, in gold—the interest semi-annually, in May and November, in the city of New York. The bonds are confidently recommended by the bankers of the Company as a most desirable investment. The November interest on these bonds will be paid by Messrs. SOUTTER & Co.

The Chesapeake and Ohio Canal Company have paid the twenty-five per cent. dividend of \$55,000 on the principal of the repair bonds, and have \$40,000 remaining in the treasury. Another dividend of \$55,000 on the repair bonds is proposed to pay on the 1st of January.

**List of U. S. Patents.**

Issued for Improvements Railroad Construction, Rolling Stock, &c., for the week ending Nov. 1st, 1870, and each bearing that date. Reported weekly for the AMERICAN RAILROAD JOURNAL, from the Office of DAVID A. BURR, Solicitor of Patents and Attorney in Patent cases, Washington City, D. C.

No.

108,777.—Spring Seat for Railway Cars, Thomas J. Gifford, Salem, Mass.

108,789.—Railway Car Axle Lubricator, Charles Hyatt, Buffalo, N. Y., assignor for  $\frac{2}{3}$  of his right to Joseph N. Milchan and Edward Schlenker, same place.

108,792.—Time Signalling Apparatus for Railroads, John G. Johnson, Coombe Field, England.

108,810.—Dumping Car, William Merrington and Nathan Kirkwood, McKeesport, Pa.

108,814.—Pile for Engineering Purposes, Thomas W. H. Moseley, Boston, Mass.

108,825.—Car Wheel, John Raddin, Lynn, Mass.

108,830.—Railway Car Brake, James L. G. Rice, Cambridge, Mass.

108,894.—Railway Snow Shovel, John W. Elliott, Toronto, Canada.

108,899.—Locomotive Smoke Stack, Eugene Fontaine, Fort Wayne, Ind., assignor to himself and Wm. Roberts, same place.

108,927.—Lock Nut, John Miller, Jr., Marshalltown, Iowa.

108,931.—Composition for Bearings, Eliza D. Mursey, New York, N. Y.

108,932.—Pneumatic Car Brake, David Myers and Albert B. Pullman, Chicago, Ill.

REISSUE.

4,172.—Corrugated Iroq Bridge, Richard Montgomery, New York, N. Y. Patent No. 25,210, dated August 23, 1859.

**Journal of Railroad Law.**

**RAILROAD COMPANIES—NEGLIGENCE—ATTEMPTING TO CROSS RAILROAD TRACKS—WHAT IS ORDINARY CARE.**

The late case of Langhoff *vs.* The Milwaukee and Prairie Du Chien Railway Company and another (23 Wis. 48,) was an action under the statute against the Milwaukee and Prairie Du Chien and the Chicago and Northwestern Railway Companies, for the killing of Mary E. Langhoff, plaintiff's intestate, by trains on defendants' roads, at a street crossing in the City of Janesville, through the negligence, as is alleged, of defendants' servants, and while said trains were running at an unlawful rate of speed and racing with each other upon adjoining tracks at said crossing. The separate answers of the defendants deny most of the material averments of the complaint and allege negligence on the part of the deceased. The evidence on the new trial was very voluminous and will not be stated here. The jury found for the plaintiff, and assessed the damages at \$10,000. The defendant moved for a new trial, on the ground, among others, that the verdict was based upon insufficient evidence; and, the motion having been denied, they appealed from the judgment. The following is the opinion of the court delivered by

DIXON, C. J.—When this cause was formerly here on appeal from the judgment of nonsuit (19 Wis. 48,) we said that, were we satisfied from the evidence that the deceased knew the speed at

which the trains were moving, or that she could reasonably have calculated it, or that she knew that there were two trains running nearly side by side over the two roads, we might then agree that the nonsuit was proper. The cause has now been fully tried on its merits, and much testimony upon these points taken which did not before appear; and from this testimony we are quite satisfied there can be no recovery in the action. It not only appears that Mrs. Langhoff must have seen and known that the two trains were approaching side by side, or nearly so, but also that with the exercise of any care on her part she must have known that they were running at a much greater rate of speed than usual. The additional testimony not only convinces us of these facts, but it shows that, looking at the trains, she paused for a moment at or near the tracks, as if to consider whether she might safely proceed or not. She proceeded, and the fatal result shows the recklessness of her conduct. No prudent person would have attempted the passage under such circumstances; and the inference of negligence is so clear and unavoidable that no jury can be justified in returning a verdict for the plaintiff. People who knowingly and deliberately take such risks must suffer the consequences of their own want of care or errors of judgment. Without, therefore, dwelling upon the evidence, which we deem to be unnecessary, we must reverse the judgment, and remand the cause for a new trial.

Judgment reversed.

**New Haven, Middletown and Willimantic Railroad.**

The Bonds of the New Haven, Middletown and Willimantic Railroad Co., advertised by Messrs. HATCH & FOOTE, seems to be exceedingly attractive as an investment. They are amply secured, pay a liberal interest, and to Connecticut investors a very large return, being free from State and local taxes there. The gentlemen forming the Board of Directors are among the most prominent men in Connecticut, and their support to the enterprise is a guarantee of its soundness and strength. The line, the Company say, will be open early next year, and when in operation will, without doubt, form one of the pleasantest and safest, as well as the quickest and most direct routes between the two financial and commercial centres of America.

The receipts into the Treasury of the City of Philadelphia during the three months of July, August and September amounted to \$2,409,004, which, with \$2,099,266 on hand, makes an aggregate of resources for the quarter of \$4,508,270. The disbursements for the same time were \$3,158,432, leaving in the Treasury on the 1st October \$1,349,837.

The work of straightening the track of the West Jersey Railroad from Mantua Station below Woodbury to Glasboro', is now completed. By this improvement the heavy grades along that portion of the road are obviated. The track where laying is needed is being laid with steel rails twenty feet long, and costing \$60 a piece.

Joshua Brown has been re-elected President, Joseph H. Nicholson Secretary, and John F. Baldwin Treasurer, of the Annapolis and Elkridge Railroad Company.

**Western Lands Opened up for Settlement.**

One of the vast resources which the United States have beyond other nations, is its landed possessions. West of the Mississippi, there are hundreds of millions of acres of good lands awaiting settlement—sufficient, if sold, to pay the entire national debt. A considerable portion of these lands have passed into the hands of railroad companies, who thus become immediately interested in the building of the roads, the sale of the adjoining lands, and their settlement by a peaceful, industrious and thrifty population. Acting under the wise policy that the railroads would confer a new value on the public lands (which without the roads would remain long unsold), Congress has granted alternate sections of land along several lines of road, and has doubled the minimum price of the remaining sections, so that the Treasury will ultimately receive just as much for its lands, and will have stimulated the construction of new lines of communication and industry besides.

The most notable example of the beneficence of this course is afforded by the Central Pacific Railroad Company, which was enabled, by moneyed assistance of the Government, to build their magnificent Trunk line of nearly a thousand miles, with but a very light financial burden; and now that their road is thoroughly equipped, and earning nearly a million a month, are ready to offer their lands for sale. This Company have, adjacent to their main line, 2,000,000 acres of excellent lands in California, 4,000,000 acres in Nevada and 1,000,000 acres in Utah. Along the line of the California and Oregon Branch they have also 2,500,000 acres, and along the line of the San Joaquin Valley Branch nearly 1,000,000 acres, or more than 10,000,000 acres in all. These lands, which the Company are offering to settlers at from \$2.50 to \$10 per acre, will ultimately realize to the Company a sum equal to the original cost of their road, and prove a magnificent return for the foresight and courage they showed in undertaking the construction of the road through an uninhabited waste. Half a million of Europeans come annually to our shores, and here is an inviting choice of every variety of lands offered to them at insignificant prices. Fifty years hence, the Pacific coast will boast of 5,000,000 population, and San Francisco will be supreme on the Pacific coast, following hard after New York in wealth and commerce.

Office of the MOBILE AND MONTGOMERY RAILROAD COMPANY, October 20th 1870.

**THE INTEREST ON THE FIRST MORTGAGE EIGHT PER CT. GOLD BONDS, OF THE**

**Mobile and Montgomery Railroad Company,**

Due November 1, 1870, will be paid at the office of

**SOUTTER & CO.,**

**53 William Street, NEW YORK,**

CHARLES T. POLLARD, President.

Office of the Mobile and Ohio Railroad Company

**THE COUPONS OF STERLING BONDS AND**  
Interest bonds of this Company, due November 1, 1870, will be paid to English holders at the office of C. M. LAMPSON & Co., 64 Queen Street, London; to holders in the Northern States at the office of SOUTTER & Co., 53 William Street, New York, and to holders in the Southern States at the office of the Company in Mobile.

A. MURDOCK,  
President Mobile & Ohio Railroad Company

**To Contractors.**

SEALED PROPOSALS will be received until the 15th of November next for the grading, masonry and bridging of the Duxbury and Cohasset Railroad from the South Shore Railroad, in Cohasset, Mass., about 18 miles, to Duxbury, Mass.

The work will be let entire or in sections, as may be desired.

The company reserves the right to reject all bids not satisfactory.

Plans, profiles and specifications may be seen at the office of the company in the depot at Cohasset, or at the office of the Old Colony and Newport Railway in Boston.

H. G. REED.

Cohasset, Mass., Oct. 27, 1870.

**ENGINES,  
TOOLS,  
MACHINERY, &c.,  
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Embracing ENGINES, PLANERS' LATHES,  
SMITHS' and BOILER MAKERS' TOOLS, MACHINERY  
and PATTERNS, &c., &c., of the most approved kinds. Also

6 HIGH-PRESSURE ENGINES, partly finished;  
2 STEVENSON-PATENT TURBINE WATER-WHEELS, 66-inch diameter;  
and 1 MARINE BEAM ENGINE, 66 inches by 10 feet stroke.

Send for Catalogue.

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THE Firm of WM. J. YOUNG & CO., MATHEMATICAL INSTRUMENT Makers, consisting of WM. J. YOUNG & CHAS. S. HELLER, was dissolved shortly before the death of Wm. J. Young. The undersigned, the late Partner of said Firm, (who was with Mr. Young continuously for 15 years), will continue in the same line of business at No. 33 North Seventh Street, (corner of Filbert).

CHARLES S. HELLER.

Philadelphia August 1, 1870.

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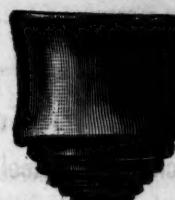
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COMBINES MORE ADVANTAGES THAN ANY FISH-JOINT HERETOFORE INTRODUCED.

This Joint is made of two heavy bars of wrought iron, or cast steel, sixteen inches in length, or any other desired length, fitted to the side of the rail and secured by four three-quarter inch bolts, with four malleable cast-iron cups and washers, and a gum ring two inches in diameter and half an inch thick, in each cup.

The value of gum to absorb jarring motion is well known; but when the pressure is as great as that required to secure the ends of railroad rails, some device, or method by which to prevent the gum from being forced out from under the washer, when subjected to increased pressure, is indispensable. The PATENT COMPENSATING FISH-JOINT secures that effect and enables Railroad Managers to apply all the force and pressure desired.

Where this Joint is securely fastened by screwing the nut upon the washer and gum in the cups with a lever three feet in length, it makes a perfectly tight joint, and thus secures what Railroad Managers have long desired—a continuous rail, with sufficient elasticity in the gum to relieve from and compensate for the sudden jar and at the same time allow for expansion and contraction by heat or cold.

We confidently claim for the PATENT COMPENSATING FISH-JOINT:

That it makes the best and cheapest form of fastening, requiring no plate or chair underneath the foot of the rail.

That it is safe and secure, and prevents the numerous accidents resulting from loose or broken rails.

That this Joint absorbs the vibratory shock given by the wheels in passing over the ends of rails, and thereby preventing fracture; and we have yet to hear of the first rail having been broken with our Joint on it.

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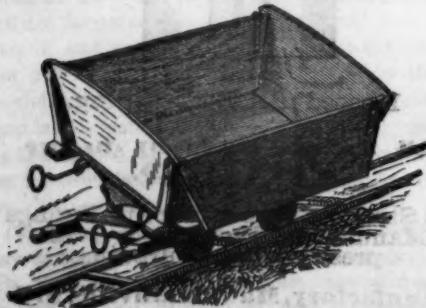
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Steamer GREAT REPUBLIC, will leave San Francisco Dec. 1, 1870, for China and Japan.

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